



Fast, economical, dependable and comfortable—



TRAVEL BY SOVIET BAILWAYS



ONTENTE

	CONTENTS	
Around the USSR	Spring, Work, Peace The Great Heart of the Kubao Union of 15 Sovereign States	
People	The Magic of Meta	,
Sconomy	Youth on the More	
international Relations	Strom Eric Winners Sasterally Advantageous Cooperation The Backed America Moscor Sarometer Garthan Raisers of the Integration Scheme	1
History	Sayastopol. Thility Years Ago	
Science & Eogineering	The Secret of the Second Voice Typing at Spotch Spited Tree Kallway Cars Skin-Divers in the Strategic How Are You Feeling Disself Installed Nature Protection Means Painstaking Deliy Efforts	12
Medicine	The Patient's Safety s Our Prime Concern	
Culture & Art	Publishers, Books and Readers Galaxy of Dances Dedicated to His Narve City, Leningrad The Colours of Life Puppeters Are Born, Not Made A Man of Great Heart	11 12
Folk Tale	How One Girl Saved Her People	1-
Sport	Ring Champion	13
Cookery	Armenian Specialties	10
Book Section	Operation Cong Jump	15

sputnik

APN, 2 Pushkin Squere, Moscow, USSR Sputnik is a digest published in English, French, Germen, Czech and Russian by the Navasti Press Agency, Eighth Year of Publication



SPUTNIK EDITORIAL BOARD YURI FEDOSYUK

Acting Editor-in-Chief NIKOLAI ZHILTSOV Assistant Editor-in-Chief

Managing Editor BORIS PASTUKHOV Social and Political

GENNADI ROSENTAL Art and Literature Department

LEV BOBROV Science and Engineering Department

Department VLADISLAV TRETYAKOV Art Director

MIKHAIL ALEXEYEV Writer MIKHAIL PESLYAK Public Figure TIRAN KHACHATUROV Member, USSR Academy

of Sciences SPUTNIK is printed in Finland

SPUTNIK BUREAU IN HELSINKI VASILI ZAICHIKOV

Director
ALEXEI BORODAVKIN
Managing Editor

The aim of SPUTNIK is to provide the reader with information about what is going on in our country, drawing on the whole diversity of the Soviet press for this purpose.

viet press for this purpose. SPUTNIK reprints, in full or in abridged form, material taken from the central and local press.

Dear Reader,

SPUTNIK
is a vital Soviet magazine.
SPUTNIK
introducts you to the best in
Soviet magazines and newsmaters — in condensed form

tells you what people are talking about the latest in science and engineering, important political issues, economic problems, Soviet

writers, travel in our country. SPUTNIK contains, picture stories. facts and figures - memoirs - fashions

SPUTNIK- read it for yourself We welcome your questions, comments and suggestions, which will be reported in the Letters Section of SPUTNIK

Sincerely, he Editors



FRONT COVER:

"Hungerian Dence" as performed by the Byelorussian State Dence Ensemble. Photograph by Valun GINDE-ROTI Design and Layout — Elen SIMANOVICH

DEAR READERS,

We want your comments and suggestions! They help in the production

They help in the production of this magazine. We await your letters.

Our address: Novosti Press Agency, 2 Pushkin Square, Moscow, USSP

All rights reserved. No reproduction in may minimer in whole or part in English or other Subplunges without permission from AFN.

YMTEISTYÖ - HELSINKI, PINLAND

Letters to the Editor

PEACE POLICIES J Would like to air a few words about the

whole would melded the progress of Canned Societary of In Costing Constitute of the Societary of In Costing Constitute of the Societary of In Costing Constitute of International Costing of Medicine Raises with Costing Costing Costing Costing Costing French Costing Costing Costing French Costing Costing Costing French F

The World Congress of Feace Forces in Moncome resolute a Bload or outgrafulation; and sufficienting federa from all contents of the Ongress o

Jindřich Han, Holešov, Czechoslovskia

A VICTORY NOTWITHSTANDING

J sould file to tell you how much J
druggee with the final decision laid down by
the International Success Federation How
could anyone in sympathy with Chric, an
uppressed country, plus in the carried of this

.

THE MAGIC OF METAL

by Edward ILYIN
from the magazine MOLODOY KOMMUNIST
Phelographs by logs VINOGRADOY

The speaker, Anatoli Makarov, is a shortish lean man, light and quick of movement, asyrastive in convensation and with an invoice call of mind. "You want to know how we make shell Each of us does it in his corn way, that a violant? It has can explain to you in world how he obtains a purabon to grow in world how he will be a short of the convention of t



MAN CHOOSES HIS FATE

"You want to know how I became a metallurgist? It was kind of accidental I grew up in a village It was near here, in the Zaporozhve Region My parents are collective farmers Well, after seven years at school I was determined to go to a city, to Zaporoshye. Lord knows why Boyish curiosity, I suppose. Father didn't want to let me go Incidentally, he still tries to persuade me to come home. Besides, I was only 15 T had entered school when I was under six And I was small for my ago. However, I had my way

"I came to the city alone and made up my own mind what technical school I wanted to go to. In the metallurgical school they wouldn't even talk to me-First grow up a bit,' I was told. Then I toted the industrial school where I faced another refusal. What could I do? I was dead set against going back home It would have been a personal defeat. I knew for sure I couldn't get a job because of my age,"

"Then I boldly - in despair marched straight to the director of the metallurgical school, showed him my seven certificates of good work and conduct for all my years at school. The director was sympathetic; waving his hand he said I could enter the school.

"When I finished this technical school I was offered a job at the

* According to Soviet Inbour Jegislation people under to should not be employed Prople under 18 should not be placed on health-burgedous and acquous jobs

Zanorozhstal Plant as a mechanic and electrician of oxygen installations. Then suddenly, you see. I fell in love with open-hearth furnaces

"I did four years' work with oxygen, coined a high qualification, made good wages became a team-leader and still I felt I just couldn't live without the open-hearth furnace.

"Our mixer department was then conducting experiments Young engi neers from Moscow had arrived Well, I made friends with them They were clever lads. Come and enter our in stitute, they said. I took their advice and decided to enroll in the Steel industry Engineers' Institute in Moscow

'With the 'help of God', I passed my entrance exams and was admitted. There followed five years of a fabulous life- I went to all the Moscow theatres and museums. Money from my father? He didn't have it to send. He has been an Invalid, Second Group, since the war and received pension only. I lived on my allowance and the student council always found places where a student could care some extra money "My academic progress? Well, in

general, it was all right, above average Though not much above.

"For my practical work I was directed back home to Zaporozhstal.

"After the third year there was a moment when I was about to switch to the Automation Department (I was tempted by a post-graduate coursel but at the plant I was told of course, it's up to you to decide, but we need people in our open-hearth section.





ourcome hangs in the balance until the very last minute. The open-hearth furnace is always a conundrum, howover many instruments you have on the control panel, however perfect the

Steel-making is a process that lasts several hours. However, no two minutes of it are identical. At times success depends on instantaneous decisions. If one makes a mistake, missing the moment the steel will be spoilt

said "missing the moment". In a strugale like this, one just has to be a tiny bit superstitious. Only an automat has no doubts about success -but only because it does not care about failure

The burgare operates in four shifts leader) and five or six assistants. Three smelter workers of Furnace

I obtained my diploma and came back to the plant I was offered a job at Europe No. 1 For several months neonle wanted to size me up, see how I would behave with an engineer's diploma in my pocket Then for an other two weeks I arted as second as-

cated engineer or technician starts on his career as a melter's assistant? It HIS PROFESSION melter's job that of a worker or an

Smelting steel is a daily battle whose The author put this question to Makarov and to others he met at the plant, and here is a summarised an-Metallurey as a field in which know-

> ledge and skills fuse together and in which the engineer-worker distinctions are at times very relative and even barely perceptible It takes a specific taleat and charge

No. 1 have secondary technical education and Makamy has a higher educa-

while working at the open-hearth

furnace on a tour shift basis. And

still many do study three assistants

on to colleges and three more to tech-

necal schools. They will become full-

How does it happen that a certifi-

ter- the ability to take risks and It also takes intuition and inspira-

tion After holidays the melter would prefer to work for several days as assistant melter - in order to regain his good form Besides each furnace has its own

"temper" - its own heat balance And the skills developed by the steelmaker through handling one furnace may prove disadvantageous when he handles another

"You can't make steel by following one pattern," observed Misha Ryab-



chuk, the shop's Komsomol organiser and an engineer who until recently worked as foreman of the furnace section. "It is like removing an appendix It seems as if the operation is very well known and thoroughly studied and still Lord knows what may hancen."

Of course, the author has oversim pittifed many things and concentrated on the melter There is also the furnace section foreman, supervising three furnaces, whose authority over the whole operation is very great, and there are assistants (some of them graduates or tudents of technical schools or even colleras) 'Shibity' per

cent of success," Makarov admitted, "depends on the assistants. If they make a mistake I can't save the situation."

tion."

And still, in this field of creation (surety work at the open-hearth furnace is a form of creation) the principal figure is the melter, with his holdeness his never his inspiration.

"You ask me if I am going to become a foreman." Malkarov says. "Naturally, But not for a while. My self-respect won't allow it I would hate people to say 'He's a young foreman, so what can you expect of him? Another year or so building up ex

To the health of all our least members and to steelmakers everywhere!





LENIN PRIZE WINNERS

WEDDWORF VERKIND NOCO SCYLETA SESS

Allende, Brezhnev, Picasso, Johot-Curie, Abraham Fischer, Ton Duc Thäng

As of January 1, 1974, 125 representutives of 54 countries have, over the years, won the International Lemm Prize for the Promotion of Peace Among Nations

Among, Nations
The president of a Latin American
republic who died a hero's death
while performing his dubes, the
General Secretary of the Central
Communities of the Soviet Communities
Party, a great artist, a famous alonei
physiciat, a while lawyer who was
thrown into a South African person for
preaching the Christian idea of the
brotherbood of man, and President of
the Democratic Republic of Viet-

What feature unites these vastly different individuals, citizens of a host

of countries, men of different political creeds and moral convictions?

mankind can and must follow the road of peace rather than the paths of war

And they have one other shared belief: they are convinced that good will alone — even if it is declared publicly does not guarantee peace. Vigorous action as needed — best of all at the state and international level — speatheaded directly against the in sainty of world war.

All over the globe, people are prepared to advocate such views and consistently work in order to translate them into life.

In 1950, a special international

prize, "For the Promotion of Peace Among Nations", was instituted in order to single out the most resolute of such people, those whose peace activities yielded the most tanelble results.

The initiative in this was taken by the Soviet Linion - a country where all propaganda of war and militarism is a criminal offence and where all psycots of internal and foreign policies are planned on the basis of a neaceful

The International Lenin Peace Prize Committee meets in Moscow once a year. In March and April representatives of the national peace and disarmament movements, gathering in the Kremlin discuss the candidates whose names have been put forward for the

development of events.

Beace Prize National and international democratic organisations have the right to nominate candidates (trade union, connerative women's youth etc. associations of scientists, scholars, cultural fusures) and also each member of the International Legin Peace Princ

Committee individually In 1973, four men whose candidacies were submitted the previous year were the winners of this prize. Leonid. Hyich Brezhney, General Secretary of the Central Committee of the Soviet Communist Party, Salvador Allende. Provident of the Republic of Chile. Enrique Pastorino of Uruguay, President of the World Redevation of Trade Unsons, and James Aldridge,

a British writer and public figure." The decision was slaned by Acade. micran Skobeltsyn (USSR), G. Alexan-

droy, film director (USSR); N. Blokhin, member, USSP Academy of Medical

Sciences Louis Aragon writer (Fran-* SEE SPETTNIK NO 6 1878. founders. Tsola Drapoicheva, was

ce). Miriam Vire-Tuominen, public fewer of Finland Renato Guttuso. artist (Italy). Anna Scehers, govelist (GDR). Keshav Deva Malaviya, cabinet minister (India) Juan Marinello, representative of Cuba in the UNESCO: Pablo Neruda, poet (Chile), Nikolai Tomsky, sculptor (USSR); George Trankoy. First Deputy Chairman of the State Council of Bulgaria and Chairman of its Agricultural Union Party; and Dr. Kaorif Yasui, professor of

international law (Japan). What kind of people do the judges think worthy of the neace prize? Here are some excerpts from the characteristics given to the 1970-71 winners by Dr. Skobeltsyn chaleman of

the international committee ". The scientific world is familiar with works by Professor Burbop in the fields of bush-energy and elementary particle physics . I am firmly convinced that nuclear physirists should be particularly keenly aware of the grave danger for mankind spelled by the nuclear arms ruce, The most progressive and responsible of them are putting themselves in the forefront of fighters for world peace, For many years one of the most principled, encreetic and consistent advocates of banning nuclear tests and supporters of nuclear disarmament has been Professor Eric Henry Stoneley Burbop, a noted British scientist President of the World Pederation of Scientific Workers and a member of the presideum of the

"... At the close of the 1940s, when the world neare movement was emerging, the name of one of its heard in many languages. The life of this prominent political and public figure of Bulgaria has been difficult but vivid. Born in a peasant family a teacher by profession, in 1919 she tied up her future with the Bulgarian Communist Party. This brave undereround worker was reneatedly anrested and twice sentenced to death After the victory of the patriotic forces in September 1944 and the establishment of neople's power in Bulgaria this woman held important Party and state positions ..."

" By his firm soon-political stand Kamal Joumblatt, a member of the Lebanese parliament, has earned wellmerited recognition among the propressive public of the Middle East A convinced opponent of colonialism. he has made a notable contribution to the formation of the Afre Asian people's movement for unity in their struggle against neo-colonialism On many prications four-blatt has been a member of his country's ministerial cabinet. The Lebenon's progressivesocialist party, of which he is leader. together with the communists advocates the interests of the working pro-

In the 23 years that have passed since the institution of the International Lenm Prize for the Promotion of Peace Amone Nations the award has been conferred on many worthy fighters whose names are now widely

Among them were Hewlett Johnson. Dean of Canterbury in Britain (a Lenin Prize winner of 1950); his fellow-citizen John Bernal, professor at London University (1953), the Brazilian writer George Amadu (1951) the German poet and playwright. Bertold Brecht (1954): the Indian poet and the present Secretary of the World Peace Council Romesh Chandra (1967): Azix Sherif, a public figure of Iraq (1963); the great Mexican artist David Alfaro Signeros (1966) Fidel Castro Ruz. Prime minister of Cuba (1960), the Norwegian pastor Ragnar Forbech, chaplain of a cathedral in Oslo (1955), the glorious Black sunger and brave citizen of the United States. Paul Robeson (1952); another prominent American public figure, the world famous scientist Linus C. Pauling (1968-69)

A total of 125 names made up the list by the beginning of 1974

Everyone recognises that people like Ludvik Syebada of Czechoslovskia or Abraham Fischer of South Africa are consistent in their efforts for world peace and ready to champion their principles in the most challenging circumstances. This makes them well merited winners of the International Pence Prize

Naturally, it is not the 25,000 row bles (which they usually turn over to some progressive cause) that they

treasure What is important is the public recognition of their efforts and the consequent extra moral support for ordinary citizens the world over who associate their hopes for a peaceful future with uniting all people of good will internationally

The decisions on the International Lenin Prize for the Promotion of Peaor Among Nations are usually published on May 1, day of international solidarity of the working people. The symbolism of the date needs no ex-

planation

by Teodor AUERBACH

I heard about this puzzling phenomenon from an opera singer
"You see one soloist," he said, "but you hear two voices simul-

"But how?"

"I wish I knew ..."

"Did you actually hear it yourself?"

"I certainly did! And I wasn't alone but sitting in a capacity-

filled hall!"

My curiosity was aroused and I turned to a music scholar for

an explanation. Konstantic Salva told me some interesting facts. The second voice. It is what we call throat stinging It really exists I saw and heard such a singer at the 7th International Musical Congress, which was held in Motrow in the autumn of 1971. He was a shepherd from Tuva, who wore his national contume. He sang in two voices at one and the same time. His lower voice was very low and even-heyed, retembling the bagpipe's bourdon. One of the pupe produces a steady bass note while another plays a highly mobile high-prieted melody. In throat singring the lower voice is loud while the upper is heard clearly but very softly. The second voice has condicable rance The combination of these two voices produces a unique impression."

"Where do such singers come from?"

"In the Sowet Union — from Buryatia, Tuva, Bashkiria The Bashkirs have a musical instrument called a kurai — a variety of the recel-pipe or the flute. Its sounds resemble throat singing. The lower volce has a humming quality while the upper is richly meleditous.

"But that is an instrument". How can the human voice create

"Some folk singers, I think, can at will single out and intensify

The sholar later located and sent me the programme of the Orober 7, 1977 concert, which said in black and white. "What is known as 'thoust sunging' is an exceptional phenomenon It is met with in some areas of Tuva. Khakasaia and Bashkiria. The singer produces two sounds at a time. It enaintains the transamental tone in the lower register while developing an involved melody in the higher In the concert, this manner of singing is represented by samples of Tuvinian folklore. A variety of bivocal solo singing is expressented by the 'Audotta' devirent inyou' style. the humming contains high-pitched sounds."

shepherd Oorzhak Khunashtaar ool

For technical details Sakva advised me to apply to the folklorist Lev Libedinsky, who wrote the book Bashkirlan Folk Songs and Melodies, Here is what he said-

"What is known as uzlau or tamakkurai (throat-kurai) is the art of producing two sounds simultaneously in the bourdon-like bivocal form. Uzlau performers are extremely few and far between."

"Have you heard this singing yourself?"

"Yes, in Bashkiria in 1939. The performer was a 74-year-old kuraist named Yulmukhametov. He produced a low sound of

unusual timbre while at the same time making his chest resonators sound, too. At last, a quiet tender trilling in a very high register filled the air. It seemed to defy the powers of the human voice Yulmukhametov had begun to learn to sing as he did when he was

14. He said he had mastered it himself."
"Did you ask him how he did it?"

"The main thing, he said, was to obtain a dark sound from your chest."

A dark sound . rather dark and mysterious process even for a successful bivocal singer!

"I wondered what medicine had to say about it, I went to the surgeon Grigori Orlov, head of a laryngology department.

"What you say is extremely interesting," he told me, "Alas, there is no mention of this in medical books."

Then I met the composer Tikhon Khrennikov. "You presided over the 1971 congress, where a Tuvinian shepherd and a Bashkirian singer demonstrated bivocal singing. How did it strike you?" "Like all my colleagues who heard it. I was overwhelmed "said

the composer. "It is an amazing phenomenon."

"Do professional vocalists ever do anything like it?"

"No. Not even in the areas where bivocal singers live. It is practised only by a few individuals — so rare is this variety of singing It requires a colossal amount of voice training. Or rather, of the training of the singer's two voices."

A VILLAGE OF POLYGLOTS

Every inhabitant of the Moldavian village of Gavanous, in the south west of the soviet Union, speaks initiamum of five trupiest— a remarkable number even in multinational southern Moldavia. The propie of Gavanous are Moldavian, Mustiana, Gaguat, Bulgarians, Ukranimas, Cereks: One humorist has advised them to learn Esperanto But the villagers get along very incley together and have no trouble communication Trave apopt cach other's language.

From the massines SOVIET UNION

MUTUALLY ADVANTAGEOUS COOPERATION

by Nikolai PATOLICHEY, Minister of Foreign Trade of the USSR

In accordance with the principles of peaceful coexistence, the Soviet Union continues to develop mutually advantageous trade relations with states willing to do so, and establishes longistanding economic ties on the basis of industrial and scentific and technical cooperation.

The socialist states, accounting for about two-thirds of the entire USSR foreign trade volume, play the major role in the Soviet Union's commercial relations with other countries. Trade with the developing countries of Asia Arnca and Later America is growing from year to year A vivid example is furnished by an agreement on further developing economic airid trude cooperation between the USSR and India signed in November 1973 as a result of Leonid Brethney's visit to that country.

The attraction of trading with the Soviet Union, which has a powerful and constantly expanding economic potential and the important place the socialist countries hold in world production form contains states to recken with the real state of affairs cess of "liberalising" trade is far from complete and in a number of rases old forms of discrimination are

replaced by new ones The advanced contralist countries of Western Europe are important trade partners of the Soviet Union More trade and about 70 per cent of trade turnover with all industrially develstates Trade with them is characterised by high growth rates expecting those of the USSR's entire foreign trade. This testifies to the inthe international division of labour

economic relations with West Euro-

onan countries have entered a new

phase Typical of this is the transfer mutually advantageous conseration on the basis of long term agreements cooperation, as well as in the sphere Soviet preanisations and foreign firms. Thus, such agreements for a term of 10 years have been concluded with Finland, France, Austria and the Federal Republic of Germany Talks are underway on stening such agreements with Italy Britain and

We are aware that the development of trade and other forms of coopera tion with the Soviet Union is circles of West European countries ternational detente and the development of economic relations with the

From time to time yourst are heard in the West asserting that the Soviet Union sains a one-sided advantage from the development of these ries. that the Russians "are pumping out advanced Western technology', etc. Some try to make the development of these ties dependent on absurd poli-The insolvency of such an approach

is self-evident, for husinessmen conclude export and import deals only when these deals interest them commercially, are advantageous or neces

Mutual benefit is a main principle of the business activity of all Soviet foreign trade corporations. In developing economic ties with Western Europe our country obtains an opportunity to more fully and rationally utilize its recources and potential and at the same time to acquire goods produced by other countries, which or which are more expensive to prodoor than to import

Western countries produce msuf ficient amounts or simply lack many kinds of raw materials, semi-processed goods and fuel, which are traditionally exported by the Soviet Union. Among them are non-ferrous metals, plywood, coal, oil and oil products was asbestos cotton various consumer goods In their tura, West European coun

tries supply us with large quantities of such products as fine steel sheet. certain types of non-ferrous metals and chemicals, woollen vars, artificial fibres, etc. Trade in machines and comment

occupies a place of importance in the with West European countries For a number of years the Soviet Union has been a big purchaser of West Euroocan machines and courpment for the chemical and wood-working industries for automobile plants for the building materials industry and for the food and light industries

At the same time the successes scored by the Soviet engineering industry made it possible to considerably enlarge exports of machines equipment and various appliances to West European countries. The Soviet Union exports metal-cutting lathes. and lornes, airplanes, ships etc.

Various appliances and household utensils are also exported, clocks and watches, photographic and cine equip ment, radio and TV sets

technology in the Soviet Union enabled it to start, in the 60's, the export of licences to West European countries for the right to manufacture industrial goods and employ the latest technological processes developed in our country Licences were sold for the production of a turbodrill, installations for continuous steel pouring, lightweight aggregate concrete, a sys tem of evanorative engline of metallurgical furnaces, etc. Agreements with West Duropean

tirms or joint development of natural resources in the USSR and creating industrial enterprises in our country on a compensatory basis is a comparatively new form of foreign economic relations. Under such agreements the Soviet

side is granted foreign credits to buy ognipment, materials and necessary licences, these credits will be renaid later by deliveries of the enods produced by the newly created industrial

Cooperation on this basis allows us to speed up the evolutation of natural resources and the creation of new

explained by the fact that, on the one hand, they receive large Soviet orders for various machines and comprise they produce, and on the other, receive on a long-term basis Soviet goods and raw materials they need

In recent years a number of agree ments have been signed with state agencies and firms in Austria. Italy the Federal Republic of Germany, France and Finland on deliveries to these countries of Soviet natural gas over the next 20 to 30 years. Simultaneously, agreement has been reached on Soviet purchases of large-diameter pipes, fixtures, machines and enumment for the gas industry, on credit repaying them with gas deliverses. French firms will supply equipment

for the Ust-Him wood-working and cellulose combine in Siberia in the period of 1975-76, which will be paid for by religious deliveries

An agreement has been concluded with the leading Italian chemical concern. Montecatina Edison, on coopera tion, on a compensatory basis, in the harding of seven large chemical combines in the USSR and on the delaveries to Italy of some products to be turned out by these enterprises This agreement will cover 10 to 12 years, with a volume of mutual de

liveries exceeding 500 million roubles Another agreement has been signed with Finnish firms on cooperation in the construction of an ore-dressing combine in the Karelian Autonomous Republic on the basis of the Kostomuksha iron-ore deposit. The Soviet side also cooperates with Finnish firms in the building of wood-working and cellulose plants in the USSR

Talks are underway with big firms in the Federal Republic of Germany about the construction in the USSR of a metallurgical plant using the method of direct reduction of tronon the basis of the Kursk iron-ore deposit. This is going to be the biggest deal yet with the Federal Republic of Germany, also in accordance with the compensatory principle. Deals of this kind have also been concluded with Japan and the United States.

Long-term commercial and eron omic ties build up trus?, create a count economic basis for stabilities and developing political relations be tween European countries and exert a favourable influence on the international political climate. It is not accidental therefore that the questions of East-West economic cooperation took pride of place on the agenda of the European conference on security and cooperation

The Soviet people are protoundly convinced that further normalisation of the situation and consolidation of mutually advantageous cooperation in all fields between European countries will become more effective and all-

embraring

in an ad which appeared in many foreign newspapers, the Bank of America publicised "our men in Moscow" Alay S Yankowich a vire-president of the bank, one of whose tasks is to help businessmen. make contact with their counterparts in the Soviet Union. SPUTNIK publishes an interview*

which Mr. Yankovich gave to

a correspondent of the weekly The Bank of America:

Nedelya.

Moscow Barometer

by Alexei YEVSEYEV from the meets's NEDELYA

"The opening of our Moscow office was held without any fanfare," the vice president of the Bank of America 'No banquets, no speeches, no toasts We simply sat down at our deaks and

'Our first visitor was an old client and a personal friend of mine. Bill He was here to organise a display of the products of his firm - medical

The statements of Mr Yankovich are



" Well, before long we found ournessmen were coming to the office every day to consult us on this or that problem Many were regular clients, often financed by our bank For example, Philip Morns (yes, cigarettes). And Cook Industries - a large company dealing in corn, wheat and cotton. Several American businessmen held discussions in our office with their counterparts from the Soviet Exportible Corporation We played host to businessmen from the Monsanto firm (chemical and oil refining equipment) and the Dupont company. which has extensive plans for business cooperation with the Soviet

"Among our frequent callers are representatives of the giant Caterpillar firm which promitly concluded an agreement to deliver \$68 million worth ot powerful tractors and building machinery to your country. We are financing the contract incidentally. the first consispernt of these machines has already arrived in

"I have just received sentlemen from Envirotech This firm concentrates on problems posed by environmental pollution (I am happy to see that you have not reached our 'level' in this field and are worrying in advance)... In general, we are never

your work you have already partially answered my next question. Still, what tasks lie ahead of the Moscow Mr. YANKOVICH, "In general, we are here to assist the bank's clients in making business contacts with the Soviet Union More concretely, we organise meetings of our clients (they come to Moscow from Japan, France, Federal Germany and other countries as well as the United States) with the required people, put them in touch with Soviet banks and forcien trade organisations. But these are so to speak, the day-to-day tasks. What I would call the strategic policy of our office is to improve business relations between our two countries and stimulate a steady growth Since I regularly inform the board of the Bank of America about the Soviet businessmen's feelings and require-

ments you could probably think of our representation here as a kind of CORRESPONDENT: "How do you think the barometer of business contacts between our countries

stands now?"

Mr. YANKOVICH "Of course. higher than it was the period of the cold war is receding into the past. To date more than ten American firms have already opened branches in Moscow Incidentally, most of these firms are our regular clients. Businessmen from the United States are coming to Moscow in an unceasing flow. Business America is aware of the benefits of contacts with the

CORRESPONDENT "What financial deal with our country does the Bank of America consider to be the most significant for itself?"

Mr YANKOVICH: "Of course, the one under which we are financine the building of a giant integrated chemical plant near Kurbyshey which will turn out agricultural chemicals. It will require 600 million 180 million have been issued by our

one on the floor resting against the wall was a newly purchased print

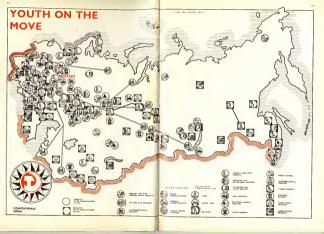
bank and an equal sum by the Federal Export Import Bank. The rest of the bill is being footed by the Soviet side In general it is an impressive American Soviet financial project I attended the signing of its final docu ments in San Francisco That session

Then not without pride, Mr. Yankovich showed me his three com paratively small rooms on the 20th floor of a Moscow hotel. The desks were piled high with papers and a typewriter was clattering away Standshowing Leningrad's Dvortsovaya I would like to have next to it another point one depicting the October revolution Let my visitors see it and think of what it means For many of our businessmen your country still remains Russia although it has for a long time been the Soviet Union Their eyes must be opened to your present. Mr Yankovich concluded. That is what we are do-

Alex 5. Yankovsch (right) is following with Werner Palifick, a customer from the FRG.



THE BANK OF AMERICA MOSCOW BAROMETER



serious thinking before reaching a decision A 17-year-old however, chooses the Antarrtic straightaway — in seven

cases of 10, including girls

This is not an assumption, it is a
fact. In the 1930s the majority of Soviet youngsters were "mait" about the
Arctic and flights to the North Pole
when our country was mastering the
Arctic seas and the year adjacent

territorics
In the 1930s young prople headed
for the virgin lands it was not a soft
job, nor one for compliances or
whiners to turn these immense wate
steppelands of Northern Karakhstran
to calilvated fields. But it was a
vital job for a country which from
olden times has experienced wanterkilling of crops. Aforolatis and dust
storms in summer:

It was natural that the mastering of the virgin lands was pioneered by members of the Komsiomol (Young Kommunist League) Earlier this year the pioneers observed the 20th anniversary since the "first peg" was driven into the soil

It was in Kazakhstan that the idea of youth building teams and top priority projects was conceived instally, they tackled the construction of needed public and service buildings on the new state farms which were suffering from a shortage of

labour

During the summer holidays stud-

ents came from all over the country to help
It breame obvious that boys and girls of 17-19 were capable of transforming large investments — in one season — into socially useful structures. And they did it with songs.

jokes, their own rules and selfgovernment
Logically, why not go further?
Instead of merely summer jobs, the

instead of merely summer jobs, the young people were offered a more substantial outlet for their energies — the construction of an entire oronomic project, from beginning to end.

of Sheria there is an excellent site for the construction of a metallurgical plant. There is a rich disposit of troo one, and power can soon be provided from a big station that was itself a top provide project of the previous five year plan. All that is lacking in manapower to give linguist to the development of an enormous region. The normal employment office channels are not good enough Shilled workers have a the man artiful color.

At the same time, in the settled areas of the country there is a huge pool of 17 to 20-year-olds with plenty of energy and ambition who are longing to go somewhere and do something — something important

reall on stakes

and significant that might even be written up in the newspapers Komsomol newspapers and magazines regularly carry features on top priority construction sites. There are

priority construction sites. There are the atomic power stations in Armenia, and beyond the Arctic Circle. In Turkmenia the spectacular irrigation projects will make the desert bloom. Siberia is now and will be in the future the home of numberiess projects that are gradually tuming the proud wilderness.

in Moldavia the elimate and work are of a different order collective farms have been jointly planting orchards on an enormous scale. The Odessa-Kishiney train chips along in

orchards on an enormous scale. The Odessa-Kishine train clips along in stretches for an hour or more beside row upon row of apple tree disappearing into the horizon. On the banks of the Kama and Volea rivers motor-car and lorry

plants are going ainto production the promise of future abundance. As the factories rise, so do bustling, lively cities where the average age of the inhabitants is under 20. Young men who have finished their two-year army stint office opt for the wilderness they lay pipelines across swamps in Western Siberia, build

milways in the primeval taiga or construct docks and piers on the stormy coasts of oceans and seas.

Or take Byelorussia in recent years this republic has been more and more frequently asking young men and women to come and help build villages

of a new type, well-planned and organised better than some cities and towns. Newspapers have given extensive coverage to Vertelishki, an experimental model of such a raral town. Photographs have shown the collective farm management buildine, with a clock tower. The

sidewalks, made of concrete slabs, lead almost to the fields and the little houses look immensely attractive. Of course, the Byelorussians hope

that some of the young comers, upon completing construction, will decide to remain to live and work in their land. Generally speaking, this is expected whenever the Konsomol takes responsibility for a building project that is vital to the country or one of its

constituent sovereign republics.

While the young volunteer builders are working on their construction project they are even courses in trades

which will be needed on completion of the work

Do many people thus settle down?

That depends, but normally the proportion does not exceed 50 per cent
Some, when the contract ends, move

on in order to continue their education. Lads of 18 are called up for malatary service. Nevertheless, the practice of toppriority Komsomol projects, with their atmosphere of youthful authour,

perority Komsomot projects, with their atmosphere of youthful ardour, pure and sincere dedication to the job, justifies itself Every year many industrial agencies

request the Komsomol Central Committee to designate this or that project a top priority one. The scheme which in essence is of a voluntary, public-spirited nature, yields sizeable economic benefits.

in 1974, 135 projects have been sagled out as "all-union Komsomol projects" fee map) It is expected that by the middle of this year, when the secondary and vocational training schools have completed their final examinations, clote to 80,000 young people will have left to carve out their third than the secondary of the secondary

assignment' in their pocket

RHINO FROM 20,000 kilometres on hour, this tional relations new machine can go Yakutia's Geological

woolly rhinoceros a of this interesting pre Tyumen, a city in West, state of Muscovy to the historic animal has been orn Siberia. They have major pusce actions of discovered in the village also devised a hovertraft the Soviet Union in

a fairly big specimen, which can carry a load of centuries ago, is reprosome hide and muscular Such transport face personalities

This valuable scientific find has lain in per

when hard frosts 100

SOARING CROSS-

ON DIPLOMATS COUNTRY VEHICLE

speed of more than 30 Editor-in-Chief is Andrei pictured is an architec-



AND DIPLOMACY Dictionary (in Russian) city Gromyko, USSR Minister tural ensemble its main of Foreign Affairs building, four storeys

Among the editors and high, is flanked by adcontributors were also joining three two-sto-V Khyostov and I Zem- reved ones, housing a skoy both eminent So sym an auditorium with viet scholars of interna- a wide-screen film-pro-

NEWS FROM THE SOVIET UNION # OF THIS AND THAT NEWS FROM THE SOVIET UNION # OF THIS AN

This dictionary high through, for instance, lights events of the lone

swamps with steep tus- history of Russian diplo chronologically This vehicle has been ranging from the early

time and historical per-

BEAUTY WED TO

The publication of a since become architecthree-volume Diplomatic tural landmarks of the equipped with the last



courtyard with its flower

luture for yuvakril, a new polymer with many valuable properties This sembles various types of susper and malachite This will make it possible manufacture of adora

ments, souvenirs - as

decorations. Some of its rich their collection. The

sorter and a swimming varieties will find an microbes are studied in application in the many, order to use them for the

Kharkov a city in the foot of the Chatkal

ratio lends vavakril diffe

esistant to shock heat

lection of over 800 yang

time and they must re

The 'museum' main

come in trequently for

this or that strain of

merobe and in turn the well as in the interior tilkramian scientists on

what is required

NATURE'S HANDIWORK

These figures, some cold, all depending on cal, were created by rain. nature enoded the cliffs. located in the Saryare a tribute to the se- MUSEUM OF MICROBES Chelek Preserve, in There is an unusual occupies an area of type of 'museum' in 24,000 hectares at the



of valuable plants and animals including an

rochs door and minks

Publishers, Books and Readers



from an interview given by Boris STUKALIN, chairman of the State Committee for Printing, Publishing and Book Trade of the USSR Council of Ministers, to a correspondent of the weekly NEDELYA

According to sociological surveys. 95 Soviet families out of 100 buy books and keep libraries.

Every sixth new Soviet book is intended for children, in our country, books for youngsters and youths are brought out by more than 100 publishing houses, the total annual circulation of children's books reaching 50,000,000 copies.

The Soviet Union has 236 publishing houses. Some are owned by the state, others by Party and trade union organisations and a large number by associations of writers.

CORRESPONDENT: The Soviet Union is the world's largest publisher. How many books have been published since the Great October Socialist Revolution? What is the annual book output?

STURALIN. Our country has for a long time led the world in annual numbers of printed publications and their total impressions. How many books and booklets have been published? More than 2.5 million titles. Their print run is close to 40,000 million copies. In 1972, for instance, 81,000 titles with a total number of almost 1,500

million copies were brought out Literature is being published in 89 Soviet languages, including 43 languages of nationalities that did not have a written language before the revolution, and in 56 foreign languages CORRESPONDENT. What is

the structure of this mass of books?

STUKALIN- You see, the structure has been in a constant state of flux, it is influenced by developments in economics, science, culture, changing demand In recent years the most pronounced trend has been toward a significant growth in output of hooks on socio-political topics and economic problems. There has been an annual metal of the second of the s

increase in the output of control of the control of control of the control of control of

CORRESPONDENT: Is it true that the Soviet Union has the

world's lowest book prices? STUKALIN: It is Judge for yourself: in 1972 the average price of a book was 45 kopecks. The lowest prices are for children's books (26 kopecks) and political publications for the general reader (35 kopecks) CORRESPONDENT, What can you say about the cooperation between Soviet publishing houses and their counterparts in other

socialist countries? STUKALIN: There is regular production of joint editions Soviet and Czechoslovak researchers are preparing for publication a monograph entitled The Present Scientific Technological Repolution and Socialism. Using interesting factual material, the authors disclose new features marking the social development of the present revolution in science and technology, its impact upon all aspects of the life of society and the activities and makeup of the individual. A team of authors of the Institute of the Theory, History and Future Problems of Soviet Architecture and the Polish Institute of Art History is working on a monograph Town and Time.

CORRESPONDENT: Please tell us something about the publication of fiction

STUKALIN In 1973 all Sovet publishing houses issued around 4,500 titles, roughly half of them new. Novels and stories by Va dim Kozhevukov, Sergei Sartakov, Yuri Rytheu and other authors centre around the workingsclass them. The Soviet Countryside is featured by Sergei Krutlin, Nikolai Virta, Sergei Voronin and Mikhall Stelmakh. to mention but four authors Alexander Chakovsky Yeveen Vorobyov Nakojai Gorbachov and several other writers have chosen as their subject the Great Patriotic War of 1941.45 CORRESPONDENT

about works by foreign authors? STUKALIN The Soviet Union regularly publishes many series and individual editions of foreign classics. A particular place among them is held by a 200volume Library of World Litera ture. In the course of this year another 20 volumes in this series will come off the press.

An interesting novelty is books of foreign poetry in two languages 100 Sonnets, by the Czech noct 1 Kollar in Czech and Russian, is about to appear We are preparing for publication a collection of poems by Soviet and Polish poets and a multilingual edition of Poetry of 19th 20th Century Europe Each noem in its two volumes will be printed in Russian and the source language

CORRESPONDENT: there be any changes in the wake of the Soviet Union joining the Universal (Geneva) Copyright

STUKALIN According to UNESCO data our country holds first place in the world for out out of translations. Works by many foreign authors have been published in much larger circulations in the Soviet Union than in

their own countries and are translated into all Soviet ianguages With the Soviet Union joining the Copyright Convention the rights of authors of signatory states will be protected in our country as well as those of Soviet authors abroad

Every sixth book in the world is Soviet 90 per cent of Soviet publications are sold within the

year they are brought out Books from the Soviet Union are now sold in 93 countries. In recent years many non-Russian Soviet authors have become known abroad. Books by the Ukrainian novelst Oles Conchar for instance, are read in 67 countries, by the Latvian writer Vilis Lacis in 63 countries, by the Lithuanian poet Eduardas Mieżelaitis in 30, by the Turkmenian prose writer Berdy Kerbabayey

The Soviet Umon has been publishing a unique series. The Lipes of Remarkable People According to the concept of its founder, Maxim Gorky, these books highlight great personalities and their endeavours. The opening volume in this series. Heinrich Heine, came out in 1933. Subsequent works in this collection included books about Pushkin Molière Joliot-Curie. Hemingway, Leo Tolstoy, Bernard Shaw Pericles Saint-Exupery - more than 500 titles



SOCIALISM: THEORY AND

of the Soviet political and theoretical press featuring articles. surveys. reviews. drawings and photographs

reprinted from more than one hundred newspapers and magazines. This digest is published in English.

French German and Spanish. It is intended for readers interested in the Marrist-Leninist theory, the experience

problems facing socialist society and the development of the socialist

community. SOCIALISM:

THEORY AND PRACTICE ie available

in hookstores selling Soviet literature. Subscriptions accepted.



Spring is the dearest daughter of the year."

All marvels of life come with spring: the royal blooming of the carth, the warm showers, the shining rainbow in the clear sky, the blee flight of skylarks.

Spring brings renewal to the heart, because man cannot live without faith in a radiant future, without the hope that it will come. Like people, hopes have their surpris and their assume.

Only the calender depends on the degree of human warmth rather than the rotation of the earth.

Workers in all parts of the globe were the first to grasp this. May, the month of the working people's proletarian solidarity, fike poppies in the

steppe, is the scarlet colour of life and struggle.

Spring comes with winds. They have not always been warm. And hopes,
artestically become reality without struggle only in few tales.

unfortunately, become reality without struggle only in farry tales.

The cool fragrance of the bird-therry floats over Moscow, and the old
elik treading its customary nath alone the sun-warmed thawed black earth,

is surprised to find at the end of the trail towerlike cranes, chilty in the pre-dawn mist. In the course of the winter the city has once again spilled over its former boundaries. In the editorial offices of newspapers the teletypes are clicking out reports.

They are like the pulse of our spring.

"The Soviet Union is building more than on university and institute complexes, Housewarmings will be celebrated by the students of the Partice Lummubs People's Priesdalipa University, the universities of Distriction Cross, Lexangrad, and Alans And. the Mostow Institute of Avisition Biogenera, the Complexes of t

Spring brings people fresh hopes.

"In the southwest of the capital, the make building of the All-Union Institute of Obsertices and Gynaccology is going up — Europe's largest mother-and-duffel pertettions center, in the west, amust the greeney of forests, a site has been alletted for a hospital for the treatment of caradiovascular diseases. Here this society of the Gynaccology will be attacked by 2000 apeculants, Moscow architects have been designing a research township for the Sherbaria Section of the Larkan Agraedian Andadion, now

Spring is transflugating the streets and pecking into factory and plant shope. The Serp is Motor (Hammer and Siddle) Plant has centered its tells decade but whoever has visited it will confirm that this enterprise is young. Its like in the continuity of efforts such by the different generations of workers, in constant crosswal of production, in the ability to utilise the immensa passibilities opened up (or man by Swelet power.

The world is tired of fear

May 1946 raised great hopes in those days even carrion-vultures pledged that they were doves Thousands of cities and towns were devastated, and there was not a

family in Europe which remained unscarred by the holocaust. The warmoneers feared that they would find themselves unemployed But in a year or two the newspapers were already writing about "dashed

hopes" and however "local" were the new wars, interventions and black Even people who were not very good at arithmetic began to grasp the theory of relativity: the world was at 'nears, but since May 1945 the planet has not known a single peaceful day Every day, blood has been spilled in at least one corner of the globe, and the machine-runs made in 1948 or 1920 were just as lethal in Korea, Vietnam, East Pakistan or

source of both happiness and grief to a country that has it underground. But nothing burns so bitterly as illusions. Those who yesterday saw in Pinochete a "saviour of Western liberties" today find themselves outside the law and the world's eyes were reported to the fact that fascism is not at all the nuchtmarish memories of 30 years ago. The burning of books in the streets of Santiago and the thousands of victims who were shot, strangled, hanged, only because they loved their people and their country, have callebtened those who were blind before But un't the price too

People help trees to survive the spring frosts

The basest human quality is indifference If it is left undefended, soring can give way to the coldest of winters

People must belo themselves. The reason why we propose reducing the burden of armaments and helping the developing and needy countries is not fear that our table will collapse from a surplus of viands. When a house is being built only a careless builder wastes bricks. But we would not be Soviet citizens if today, at the close of the 20th century, we could indifferently watch millions of

people die of hunger We, who in the last war lost more than any nation, we know what grief is So, when some politicians see in our business proposals "Kremlin

intrigues" we answer it is better to trade then to bury our sons. Coexistence is the logic of common sense. Pragments of the bombs that burst in 1944 are reaching 1974. In Japan

there is no end to the lengthening list of Hiroshima victims. Today a small part of the world's nuclear stockpile is enough to destroy all mankind. Only a maniac can dream of a triumph on a charred planet. Our blue cradle is too small for such "experiments"

Indeed, the Kremlin does have plans, but they are not secret it plans to give people confidence in the future, to enable mothers to serencly raise their sons, and the sons to live full happy lives, rather than lie with bulletsmashed heads under allen stacs

Only unconscientious individuals can close their eyes to the aims of the USSR's national economic plans

The past third, decisive year of the Ninth Pive Year Plan period was marked by fresh advances of our people in communist construction, in the realisation of the Soviet Communist Party's Leninist general line in domestic and foreign policies. A powerful new upsurge of civic activity was aroused in the Soviet people by the decisions of the December 1973 Plenary session of the Central Committee of the Soviet Communist Party and the 7th session

of the USSR Supreme Soviet of the 8th convocation and the statements by Leonid Brezhney. In addressing the December Plenary session, L. Brezhnev pointed out that in the course of recent events the unity of the countries forming the socialist community yielded good results. The changes in Europe favouring European peace and security are becoming increasingly noticeable. The year 1973 brought marked progress in Soviet-American relations, above all, on the main issue - the lessening of the danger of war and consolidation of peace

The Soviet Union is actively developing its contacts with Asian states, A vivid example of this is Leonid Breghney's visit to India. The multifaceted activity of our Party and the Soviet state designed to implement the Programme of peace, which was advanced by the Party's 24th Congress, enjoys the recognition and support of all peace-loving

forces on our planet, of all progressive mankind Graphic evidence of this was, in particular, the World Trade Union Congress in Varna and the World Congress of Peace Forces in Moscow. Peace, Moscow, spring - these concepts have become indivisible

An intercontinental rocket can lift a warhead with a hydrogen bomb and

a peaceful spaceship. Mankind breathed easier on hearing that Soviet and American spacemen were exchanging the handclasp of friendship. The road to the stars is the future of all mankind and I am not the only one to remember what a Russian cosmonaut said when a correspondent asked "What is the most important element in the preparation for joint flights?"

"It is the ability and possibility to always come to each other's aid. There can be no victory in outer space without this" But is the victory of spring, friendship and common sense in the world

possible without this? "The ability and possibility to always come to each other's aid ..." is the voice of our spring

In folk tales spring has always been depicted in the form of a young maiden with a green branch in her hand

with building projects and flocks of rooks fly over the mist rising from the tilled black earth

Springtime is a busy season for those who grow the food for our 250-million people. On thousands of collective and state farms ploughing is in full swing, Our hard-working farmers have one wish - a peaceful sky and good crops for all the people on earth

RERLIN IN THE SPRING OF

On May 9, 1945 at 0.45 from the memory THE MAIN DIRECTION

Moscow time, a representative AWAKENING TO LIFE As we neared Berlin, we soldom of the Hitler command

saw people ploughing the land or planting potatoes. The few we did see somed in Berlin an act were isolated individuals tilling tiny plots of land. The ereater part of the territory between the Oder and of complete and Berlin and even west of Berlin remained uncultivated. Apparently the unconditional surrender Germans were not thinking of the future. Many of them believed they were doomed and feared they would have to pay for all the horrors the How the Soviet command began Reich had unleashed upon the peoples

of fascist Germany

to normalise life in this

large, half-ruined, famished city is described in his memoirs

> by Lieutenant-General Nikolai ANTIPENKO

A group headed by Walter Ulbricht arrived in Berlin, After familiarising itself with the situation, it asked the Soviet command for aid in rehabilitating the war-rayaged German national economy in providing the population of German cities and villages with food, fuel and other necessities The Military Council considered the

of the world, the Soviet Union above

appeal with understanding and assigned me, as deputy front commander



Organising Berlin food supplies.

for logistics to work out appropriate proposals. Eventually 1 reported that the troops of our front had begun soring sowing. By May 5, 1945 the acreage under cultivation had reached 350,000 hectares. But this was very little. At least another five million hectures needed to be sown, which into the work.

fact that many estates remained ownerless, some of them had been taken over by peasants who had appointed their own managers, but the rest lay abandoned. We had to put a stop to the grabbing of unworked land, mobilise whatever farm machinrepair work, halt the regulation of horses, and most important, help with send notatoes tractors, fuel and

The Military Council agreed with my proposals. The Germans were issued thousands of tons of potaroes, millet, peas and other crops, which could still be planted and sown. We also beloed them with tractors, machines and fuel. At last all the farmlands were put under cultivation Working in the fields, the Germans awakened from their letharpy and showed that, as before, they were calculating masters and industrious

BERLINERS HURRY HOME

But while the organisation of sowing was a form of concern for the future. the organisation of immediate food supplies was a pressing problem of the present. The working people of Berlin had long been suffering from undernourishment Toward the end of the war hundreds of thousands were starving The bourgeoisie had fled but the workers remained, so the Soviet government showed concern for them even before the surrender of Germany. Once in Berlin, the Military Council of the front, pending relevant deciof Ministers, and General Andrel Khrulyov, thief of the Soviet Army rear, arrived in Berlin with a gamse aid to the population of the

city

According to the new ration schedule, people who did heavy physical work and those in sobs presenting a health hazard were given a top daily ration- 600 grammes of bread, 80 grammes of cereals and macaroni, 100 stammes of meat 30 erammes of fats and 25 grammes of sugar. The ordinary worker's daily ration consisted of 500 grammes of bread, 60 grammes of cereals and macarons 65 erammes grammes of sugar. The rest of the population received 300 grammes of bread. 30 grammes of occeals and macaroni, 20 erammes of meat 7 sugar Besides, each inhabitant was entitled to 400-500 grammes of pota tors a day and 400 grammes of salt a month Emally, by ration cards coffee and tea were issued Scientists scholars, engineers, doctors, people in the cultural and arts fields, municipal and district self-government evenofficials, were given the top ration rates. Technical workers, businessmen. teachers and churchmen received the standard workers' ration. Hospital

patients were given special rations Besides, Mikovan ordered that a daily 200 grammes of milk be issued to each Berlin child up to the age of 13 On the hous of these rates we calculated the food deliveries. But here a difficulty cropped up Berlin's registered population was a little over two million, so we had this number of the corresponding supply order Suddenly the situation changed On hearing that the Soviet Military Command intended to feed the people of Bertin Jone columns of men wamen and children began to file to the capital from all parts of Germany. They came by bicycle, motor-cycle

to raise the number of ration cards to four million

NATURAL COFFEE

While we were busy with the organisation of food deliveries. Berlin was flooded with a host of provocative rumours. People even whispered that Germans would be gathered at the food distribution centres as part of an all-out round-un campaign. However, on the appointed day and hour (eight o'clock in the morning of May 15) all stalls opened and food began to be

Not long before Mikovan was reading the text printed on the ration card. He looked up and asked me "What coffee are you soing to sive

the Germans?"

"Ersatz," I coplied "Why not natural?"

I said that the front did not have natural coffee in its depots and that I myself had not drunk it for quite a

"You haven't got it in your depots but the Soviet state has it" said Mikovan "Take the trouble to add the word 'natural' to coffee on each card" We had to have this word printed additionally on four million cards

While we were making this amendment a trainloads of real coffee beans left Moscow for Berlin The

principal water mains restored. Fighty. five thousand buildings and all welfare enterprises have been connected to the Before me is a report dated June 21

railwaymen gave this train top

cards has been issued for lune. The

cient The children are being given

milk regularly Food deliveries are on

private practitioners. The main health

service administration and district

health bodies have been set up in Berlin.

power stations has been brought to

98,000 kilowatts. Thirty-three thousand

homes. \$1 waterworks and sewerage

stations four bathhouses seven lound-

ries, 480 barber's and hairdresser's

shops and 1.084 bakeries have been

connected to the electrical network

More than 3,000 street lamps have

"15 pumpine stations with a daily

"The connecty of operation electric

priority.

schedule

and buried.

have been out into operation and the water supply system 1945 on what had been done to nor-"35 sewerage stations have been malise the situation in Berlin, It saysopened "The required number of food ration

capacity of 510 thousand cubic metres

working, with \$2 stations and 16 trains with a total of 62 cars

"8 tramlines with a total length of 65.4 kilometres and 122 cars are

"Extensive medical and enidemia-"7 omnibus lines with a total length logical reconnaissance has been carried of 91 kilometres and 46 buses have out and hotbods of infection liquidated. More than 2,000 bodies of

animals in the city have been collected "5 gasworks with a total daily capacity of 157,000 cubic metres have been made operational

ed and polluted sources of water pro-"6 bathhouses are operating and 5 are under repair to laundries are open. been established over refrigerators. sausage plants, canneries. Ninety-two "18 freight trains have been made adult hospitals, four children's hospiavailable for coal deliverers from Silesia. Briquette coal from Munche-

here is being carried by 25 trains 850 shops, nine outpatient hospitals, four dispensaries, 13 medical posts, three children's consultation centres and six "The functioning theatres are: The first aid stations have been opened Western Theatre, with a baller troupe The overall number of hounital hode performing, the Renaissance Theatre made available is 31.780; 654 doctors (comedy), the philharmonic symphony are working in medical treatment orchestra, opera and drama theatres establishments and there are son

will resume performances in the next few days, 45 variety theatres and 127 motion-picture houses are running, with a daily attendance of between 80 to 100 thousand ..."

These lines make me think of the German Democratic Republic of our day of the flowering it has achieved As is known, the GDR is now among the world's 10 most developed countries, its industrial output equals that of all prewar Germany. The first spcialist state in German history is firmly and confidently carving out its

future.

TYPING SPEECH SPEED

by Alexander RATOV from the stuggaine IZOSWETATEL I RATSIGNALIZATOR

person can type 400 symbols a minute - tmice the speed of a skilled typist - if he employs a new apparatus which has been designed by Georgi Zagorelsky, a young Leningrader. A more elaborate

persion of this GEZOTYPE (the name is formed from the initial letters of the innentor's first and surname) mill make it possible to type more than 800 symbols a minute, in other words, to type at the

At first Georgi had the idea of designing a speed typing device that would fit into the mouth a thin plate with sensors on the palate. Touched by the tongue. the sensors would react by actuating the electrict typewriter. Very soon, however, this concent had to be discarded as impracticable. Then Zagorelsky developed another idea: in talking, man uses his lips, tongue and teeth - only three main sound-forming "variables". Tyning involves the ten fingers of his hands. This seemed to offer greater possibilities. But the speed of speaking varies from 600 to 1.000 symbols a minute After a week's training a while a skilled typist can get up to 200. Hence, the typewriter

> keyboard is imperfect, slowing the fingerwork. What if a panel were built that would permit man to simply move his fingers left and right when setting down symbols? Try tapping your fingers on the table. Then rub back and forth quickly and you will see that the second type of movement is much easier and faster

The latest model of Zagorelsky's device is a control box that can be placed on the palm of a hand. By running fingers over the box's panel, you can feel speed of speech. slightly protruding knobs which look like mushroom cans. There is a wire stretching from the box to the typewriter.

"There are six knobs acting as sensors four of which form a column in the panel's middle and two on its sides; by simply running your finger along them you can instantly type any text." explained the inventor "Of course, the position of the 'cans' must be learned before setting about typing"

By touching the sensor, the operator's finger turns it and the sensor, in turn, closes with the edge of its "cap" either the right or the left pair of contacts. By running the finger alternately from the right and from the left along the central sensors. one can type eight letters. By running the fingers over the panel's surface and touching the sensors in different combinations, one can reproduce all the letters and signs of the Russian alphabet. The signals coming from the contacts, by passing through the gezotype's simple electronic circuit, switch on the corresponding electromagnets. which type the required letters.

Ussing two panels - one for each hand - can bring the speed to 800 symbols a minute - practically the speed of speech.

"The use of the gezotype in typewriters is not an end in itself," commented Zagorelsky "This device can be employed in wide-ranging information machines. Or take another possibility: conversion of the text into a visible forms on an illuminated indicator board would make it possible to lecture to deaf-anddumb people. The gezotype could put the telephone within reach of the deaf, the caller would set symbols on the heard and the signals would be transmitted to the electric typewriter of the one being called, who would then be able to read the visible text."

Essentially, the panel of this new device is a keyboard. It is a tempting idea to use it to replace the complicated keyboards of telegraph apparata, lettersorters, the panels of computers and automated teaching devices. etc. Of course, it could have many other applications. An incentive to its development is the fact that even a laboratory sample costs only 20-30 roubles. The inventor maintains he has spent less than 10 roubles on it





Lyube Bezuglova (in the middle) is back from a Irip Io Moscow and has penty to lalk about.

It is so nice on a hot day to stroll around in the Krasmodac city pack. The shady lane and fresh wind from the Kuban Kwer make it pleasant and cool. And a landmark one inevity stops to admire, is a giant oak tree towering above all the other trees. Toresters assert that this oak it cover 300 years old. Historians recount the following legend associated with

In 1723 a detachment of Zanorozhye Cossarks on their way to the Kuban to guard the southern frontiers of the Russian state, stayed overhight under this tree, which was later called 'Zaporozhye Oak Tree' When the warriors woke up the next morning and looked around, they realised that no better place could be found for the construction of a fort. So the Orekhovaty fort inamed after the nearby lake of the same name) was built. The fort soon grew into a settlement and later a city which became the capital of the Kuban Cossacks. The city was called Eksteringdar, In December 1970. st was renamed Krasnodar

The "passenger" has decided to go For a walk.







In 1900 the population of the city

numbered about 70,000. In 1960 it

was 315,000 and today it is over half a

Krasnodar is an industrial city. The

production of the Krasnodar plants -

bravy vertical semi-automatic turning

lathes, machine-tools with an electro-

copying device, heavy compressors,

industrial refrigerating plants, electro-

measuring and radio-measuring in-

SPUTNIK

struments, textiles - are well known abroad as well as in the Soviet Union Ricctro-measuring instruments, for in-

stance are exported to more than 40

countries The growth of industry in Krasnodar required a lot of electric power. The

problem was solved when a heat and power plant operating on the local natural gas was constructed Apart from the usual high-capacity power

rich soil of the Kuban will yield even better crops. The administrative centre of the large and fertile Krasnodar territory, the city is closely ennneeted with agriculture. There are more than 20 scientific research institutes in the city and many of them are working

Not so long ago scientists of many

on agricultural problems

units, the Krasnodar heat and power fields and gardens with water The plant has gas-turbine installations of

it will provide the rice plantations,

In the last few years a large hydro-

technical development has been under

construction on the outskirts of

Krasnodar- a man-made "sea" is being

created, an artificial reservoir with a

capacity of three thousand million

cubic metres of water. In dry weather





The city park is a favourite recreation spot.

it's always crowded here, but even more so on holidays.

countries believed that the maximum oil content of sunflower seeds runs to 21-24 per cent However, Academician Vasili Pustovoit of Krasnodar has grown new varieties of sauflowers which yield good grops have a high resistance to diseases, and the seeds contain 50 per cent oil. Another sci-Payel Lukvanenko, a son of a Kuhan Cossack grain-grower, spent many years growing varieties of high yield wheat His varieties "Bezostaya", Aurora" and "Kavkaz" yield up to 60 centners of grain per hectare on Kuban

studies. There are 80 secondary, 15 special and technical schools and six establishments of higher education in the city Recently a university was opened The Krasnodar agricultural the largest in the USSR

Every fourth person in Krasnodar

Very soon Krasnodar will be known as a resort town. Underground springs of juding-bromide water of high medicinal effectiveness were discovered recently. A large balancological complex - containing a hydronathic unit a

polyclinic and living quarters - is under construction

From year to year Krasnodar is growing and becoming more and more brautiful. The little houses made of turiuk - cane and wattle coated with day - which was the main buildmy material in the Kuban in the past. are being demolished. In their place rise modern apartment blocks made of concrete, brick and glass. In the last few years, three theatre buildings (drama, musical comedy and puppet show), and an unusual circus building have been constructed New public gardens and parks are being opened. Krasnodar will soon cross the

Kuban river. The project of a new district on the other side of the river is being worked out in great detail. The new district must be self-contouned and at the same time an organic I am standing in the park next

to the Zaporozhve Oak Tree" and this silent witness of the city's birth seems to be staring in amazement at its turbulent growth and listening to the powerful heat of the great heart of



"THE PATIENT'S SAFETY IS OUR PRIME CONCERN"

Dr. Boris Petrovsky, a Member of the USSR Academy of Medical Sciences and USSR Health Minister:

"In our time the key indicator of the level of medical care in any country is how much its health services employ the latest scientific achievements."

CORRESPONDENT: Rapid implementation of scientific achievements in practical medicine has always been an acute problem What is the state of affairs in this field in the Soviet

Union? PETROVSKY: Almost 400 large research institutions work on theoretical problems of medicine in the Soviet Union, annually completing more than 10,000 investigations. The problems of traumatology and or thopardies, for instance, are explored in over 20 research centres, let alone the relevant chairs of medical institutes. All this immense endeavour is coordinated by what we call problem commissions of the USSR Academy of Medical Sciences They receive detailed information on all recent developments, evaluate new investigations and see to it that they are speedily out into practice. The definitive assessthe Medical Research Council of the HEED Menith Ministry.

CORRESPONDENT: How are me cal innovations tested in practice?

cal sinovations tested in practice?

PETROYSKY. The entire activity
of the USSR Health Ministry is affect
at the extensive utilisation of effective
remedies and means of disease prevention. The Soviet Usion has more
than 60,000 treatment and prevention
institutions. Considering the scope of
antitutions. Considering the scope of
the extensive industrial manufacture
of medical mercantions in the nast

two years, for instance, we have launched the serial manufacture of 193 medicines and another 54 are carmarked for production in the near future.

But — an obvious groundrule for a truly humane society — we thoroughly test all new preparations before their extensive clinical app

lication is permitted.
Take, for example, Take, preparation and the analysis of the properties was obtained by chemists of the forganic Synthesia Institute of the Latvian Academy of Seferces in 1866. In the control of the properties on animals — not only its effect on different 1990 of tumours, but also its side-effects and toxicity. Flooritute was proposed for clinical tests. The Pharmacology Committee of the Sound of Introduction of New Medica.

permitted these tests

They were supervised by the Chemotheraperisal Centre. It worked out a routine procedure for the application of this preparation and the indications for Fluoratte treatment only after all missivings were dispelled with fluoratte treated on a limit of the control of the control

No medicine, whether obtained in Soviet laboratories or received from abroad, can be used without this committee's permission. And not only medicine The same applies to all remedies and methods of diagnosing, prevention and treatment of diseases. CORRESPONDENT: In: In: It this pro-

ers rather involved?

PETROVSKY: Yes, it is an involved process. But it cannot be otherwise if

we really want to protect the patient's the initiative of the doctors theminterests. The patient's safety is our

CORRESPONDENT- And still how are so many new preparations put PETROVSKY- It must be noted that

advertising medicines among the population is banned in the Soviet remedies. In addition to the more than 100 Soviet medical newspapers permanent refresher system, which About once in five years each doctor attends an advanced training course and hears lectures given by the coun-

try's leading scientists and visits research institutes and the top clinics Medical research societies unite practising doctors working in each of the country's regions. At regular all union and republican conferences and symposta on widely-ranging medical problems, doctors in addition to dis cussing these problems, exchange their experience and report their advances CORRESPONDENT. Does the introduction of a new medicine depend on

PETROVSKY. Their muliables or indeed a vital factor. A serious recommendation of new medicines or treatment methods is the order of the USSR Health Ministry, which permits their application in the clinic All health service bodies employ leading experts in each field of medicine who are personally responsible for the execution of this order throughout the entire system of treatment and preventive institutions - ranging from a rural hospital to a research institute clinic. This makes the introduction of the new into medical practice in-

dependent of anybody's subjective CORRESPONDENT: All this must

PETROVSKY Why unplanned? The state makes budgetary allocations for Extra allocations to medical institutions are made by the local Soviets from their over and above-the-plan incomes Fraully, medics are greatly helped by industrial and agricultural enterprises

LITTLE MUSICIAN Koba Megrelishvili, a pupil of Thilia kindernaries No. 27, devotes all his few time to music. He has already composed for his playmates an opera Little Red Riding Hood

The youngest composer in Georgia displayed interest in music while still an infant. At the age of three he song duets with his mother, and when a rhythmic orchestra was organised in the kindergarton. Koba played xylophone and drum Later he started to conduct and compose songs. In Pebruary, 1973 when he was

six, his opera Little Red Pidins Hood was completed

Koba cannot read notes yet. His mother helps him writing the melodies he sommores.











Collectors' Corner

This series of postage stamps will be specially liked by those interested in cars. The designs reflect the main stages in the development of the motorcer industry in our country:

BUSSO-BALT (1909). The first and only model to be prodeced in the Ressia of those years. The parts were imported and assembled at the Ressian-Baltic plant in Riga.

AMO-F-15 (1924). First Seviel Jerry.

the Heep

NAMI-1 (1927). First Soviet car. YA-6 (1929). First bes. GAZ-A (1932). The car with which mass prodection started.

Pre-revolutionary Russia did not have a motorcar industry. The production of the Russian-Baltic plant cannot be counted. During World War I construction began of a lew car plants but not one of them was actually built. Car production in our country actually began in 1924. The end of the first five-year plan (1931—32) marked the beginning of the intense development of the industry in



GALAXY OF DANCES

Photographs by Value GENDE-ROT

The folk dances of the Soviet Union are infinite in their variety and the galaxy of dance groups in the country reflect the imagination, originality and picturesqueness of national forms and traditions.

"Wedding Dance" performed by







[Golden Grain].

In the Archangelsis region the dance is scene and specieli, it flows to a metody, On the Volga it is lively and vigorous, with plenty of helevely and the Chukchi, the Values and other peoples of the Fars North imitate brids and animals in their dance movements in the "Lyaniar" dance the light control of the Volga in the "Lyaniar" dance the light control of arrowing flax in the medical or arrowing flax in the Archangels i

From the earliest years of Soviet power the wealth of dance traditions of the Soviet peoples has been the tocus of close study Ethnographers,

In Moldavian, "Thok" menn harvest bioliday, the Moldavian Folk Dance Entemble took this name for th own.

fine arts historians, choreographers, musicians, have criss crossed the country. They have collected and written down folk dances. They have created new compositions and stage productions based on them. The art of folk dancens has develop-

of rapidly and intensively. Today there are hundreds of professional song and dance entendles, folk moirs, national dance studies in the country Republican and all-Union art festival attract representatives from more than 100 nationalities of the USSR.

Such groups as Beryozka, the Mosseyev dancers, the Northern Rus-







Choreographic etude "Girls of Ferghana", performed by the Uzbek "bakhur" danna group

The fiery dances of Georgia invariably delight audiences.

The Armenian State Song and Dance Ensemble.





Members of the Ukrainian State Dance Ensemble doing the Transcarpathian

stan Folk Chorr, the Tajik Lola, the ensembles of Georgia and Armenia the Don Cossaik Song and Dance Ensemble, are known throughout the world.

Some its years ago on some the footstam, takenyn in ill frented steeler. Some in its frented steeler is stated as a state of the steeler fraging from the steeler fraging regards and state the technical fraging regards and state the technical fraging fraging the state of the steeler fraging fraging the footst to the further of technical fraging frag

At an international folk dance competition held in Tunis in 1967, the Krasnoyarsk Ensemble, from the faroff banks of the Yenise, won first prize. Western dance critics called their performance a "Siberian sym-

The Moldowan dazer proon Zolah has may lass He words of one of the differs which are called out at the threshold of the differs which are called out at the height of the disonage on Wherever Moldowans dance the earth fermilitis. Their preparation a rander of which ever they do, maint dinner or homorous manher it circus a partial, of the people's the, customs, character victualization of the consequence of the control of th

It is impossible to cover all this change groups in the country Earth year, new ones are added to the roster—such as the Vorcent Lada, which won a prize at the Fdth International Folk fore Festival in Yugoslavia, or Yolo Cask, a fernale dance group from the Komi Autonomious Republie. The Komi Autonomious Republie The Creative absorption of folk dances leads to interesting results in modern dance imagery.

"It is not enough to gather probles on the shore of the ocean of folk art," says 1gor. Mosseyev, famed ballet master and connousceur of dancing. "One must bouldy plungs into the ocean investigate its depths, penetrate its mysteries and make use of them for the benefit of art.



TIP-UP LORRY EQUALS THREE RAILWAY CARS

by Victor MOLCHANOV and Ivan NOVIKOV

The dust had not yet settled after a thunderous explosion before powerful tip-up lorries were already carrying away blocks of iron ore from the huge quarry The lorries made at the Byelo-

The lorries made at the Byelorussian Motor-Car Works, in the town of Zhodino, near Minsk, assist miners, colliers and hydroelectric project builders. These lorries handle annually about 2.5 thousand million tons of rock.

"Now we are turning out lorres capable of transporting loads of 27 and 40 tons," commented Z.1. Strokfis, the plans's chief cngancer. "One of the targets set by the Twenty-Fourth Congress of the Soviet Communts Party in 1971, reads Organise the production of automatic tip-up torries and tipup lorry trains with a hosting capacity of up to 120 tons for capacity of up to 120 tons for directly applies to our plant directly applies to our plant.

oped a family of lorries of three basic models, with a capacity of 75, 120 and 180 tons respectively. Recently, the 73-ton thrup lorry successfully passed tests and was recommended for serial manufacture. The prototype of a 120-ton lorry will soon be produced. Miners of the Kuznetsk Coal Basin will be the first to 'sample' it".

In the plant's experimental shop we felt as though we were in a kingdom of giants. The ladder to reach the cabin of a 120-ton tip-up lorry

'The increase in the lorries' load capacity" explained the chief engineer, "stems mainly from progress in open pit mining. Employed in open pit workings, heavy-duty lorries cut capital expenditures on diseing by one-third and allow for the use of excavators with large-capacity buckets. The quarries are growing deeper every year. In the 1950s the quarry's depth was on average, 50 metres. By now it has doubled. The slopes alone which rock is delivered are becoming steeper ...

"Our 'quarry toiler' has other distinctions from its counterparts which race along asphalted roads. Operating over a small territory, the tip-up lorry has to be highly manoeuvrable, have a sharper turn radius, be safe for the driver and easy to handle.

"The load upon the lorry's axles when the excavator dumpor ore into its body rises eight times. The usual leaf springs cannot make up for such a difference in weight. The plant design engineers have devised pneumatic springs with hydraulic shock-absorbers.

"Roads in quarries are difficult, with long climbs and steep turns. The usual gearboxes won't do here Designers have sus-

gested a hydromechanical transmission. It has already been anplied in 27 and 40 ton lorries' The best answer to the problem in the case of the automatic tip-up lorries carrying loads of more than 60 tons is electric transmission. It has been devised by the Byclorussian Motor-Car Plant engineers jointly with experts of the Moscow Dynamo Plant, Each driving wheel has its own electric engine. All lorries of particularly great hoisting

capacity have been fitted with

such wheels "Work in deep quarries will be done by what we call trolleycarrier - a new type of lorry,

the chief engineer explained "On an even road it is powered by its own engine. In order to make steep climbs, the lorry is conpected to electrical network

"The new lorries will naturally, require more powerful engines A 75-ton lorry needs an engine of up to 1,000 horsepower, a 180-ton lorry one of 2.000-2.500 horse-power The

designers set their hopes upon gas-turbine power plants. Among the advantages of the turbine are low-toxic exhausts and ease of starting in hard frosts (winters are severe in the greater part of the Soviet Union). True enough, so far, such engines reourc more fuel than diesels The plant is conducting research which will shortly make it possible to equip our lorries with

gas-turbine engines." "What tyres do you use for such giants?"

"The wheel diameter of a 75ton lorry is 2.5 metres while the wheel diameter of a 180-ton lorry is 3.5 metres. The tyres are more than one metre wide."

The giant Byelorussian tip-up lorries are the fruit of creative cooperation between researchers and workers of many industries These lorries are brainchildren of machine-builders as well as chemists and electrict welders. experts in electronics and miners envine-builders







BOOKS IN 132 by One DOBROVOLSKY HORD THE PROPERTY OF ADDRESSION TO ADDR

The All-Umon State Library of For eign Literature in Moscow contains one of the largest collections of classical and modern world fiction as well as works on the humanities, natural sceners and fine arts.

LANGUAGES

A reader can order any publication out of the more than four million volumes in 132 languages and receive it within half an hour

The library has it reading halfs including an audio visual department Here a person can listen to tape recordings, records, or watch silose and educational films. People who are studying a foreign language often come here in order to listen to linguage before records. The library has a permanent membership of 60,000 men and women from all walks of life The daily attendance cuns between 1,300 and 2,600 lesoders in 590 fowns and cities across the Soviet Union receive books from the Poreign Literature Library through an inter-library exchange strong.

A new spacious library building on Ulyanovskaya Street, possessing the latest equipment, was build in 1806 At the present time an automatic system of servicing readers with thu belp of electronic installations is being

The library has a staff of 700 The study of contemporary foreign litera ture falls within the scope of Jisactivities, at well as publishing. The tibrary produces information bulletties on foreign faction fine arts, natural and social sciences, methodology of traching foreign languages and provides bibliographical lists.

The Breary has extensive foreign connections It is a collective manber of Irendalup societies with Han agray, Poiland Colos, the Koreas Propies Feminerate Republic, France and other countries It cooperates with UNESCO and the international Per decision of Liberty Autocutoms There is a permanent book exchange extraogeneer with Brinners publishers; universities and scientific establish mentals in the quarters found contribution of companying and magazines are supported in magazines.

Transport of notices — Lindow are proposed to the control figures to the proposed and the library. At various times then the library. At various times then Barbasse. Richard Aldington Pablo Neroda James Aldridge, C. P. Sow, have appeared here. Regular operations of the proposed to the various of the propersists would writers and propersists would writers.

During my tour of the library 1 stopped to talk to Elena Karabezova. a fifth-year philology student at Moscow University Shr comes from Yerevan Armenia, and this is bes

'I have been a steady visitor here since my first year, but recently even more so since I am working on my thesis on the early Heine I have access here to the must varied works

Another reader is student Vladimir Belikov, who is specialising in structural and applied linguistics Before him lay several books in English but the one he was reading was in a language totally unfamiliar to me

Viadimir explained that the title was Hassalan Antiquities and Polithere He said he was studying Hawaian and that in the library he could get many rare books in little known tongues in the Asia Africa residing room I

had one more encounter — with Zakhid Kamilov a postgraduate student at the Institute of Oriental Studies of the USSR Academy of Sciences

'Pm from Tathkesty.' Zakhid said f teach Hindl and Urdu in the local university Before that I studied at Luknow University in India on an exchange basis. At present I ani work ing on my thesis on the grammar of Hinds and Bengali. The conditions for work beer are excellent.'

Union of 15 Sovereign States

......

The Soviet Union has the greatest number of nationalities of any state in the world. It is inhabited by more than 100 nations, nationalities and ethnic groups.

Before the 1917 revolution the majority of them were downtrodden and backward connomically and culturally and lacked elementary bunna rights Cararts officials termed all citizens of non-Russian origin "aliens" Many nationalities living in Sibetia, Russa's Far East and North were doomed to extinction due to merclies exploitation, hunsee, poerty and disease.

Soviet power based its nationalities policy on the principle defined by Lenin as follows not a single special principle for any nation. They all have the right to self-determination, up to and including the right to secced from the USSR Relations between

peoples are founded on equality, mutual respect, mutual assistance, and selfless friendship. As early as the eighth day of its existence, on November 13, 1917, Soviet power made public the "Declaration of Rights of the Peoples of Russia". That was the first legislative document proximing equal rights for all citizens, irrespective of colour, race or nationality. The same law is part of the present Constitution of the LISSR.

The principle of equality stems from both the essence of communist theory and the nature of political power in a socialist country. The country is ruled by the working people themselves. Obviously, where workers are at the helm of state there is no exploitation of man by man in a socialist society there are no groups interested in enslaving, plundering and exploiting other sections of the nounlation.

How, then, is equality of various peoples - big and small -

The right to work, leisure, education and social insurance, are guaranteed to all Soviet citizens without exception. People of different nationalities — men and women allike — receive equal pay for equal work. The same principle operates in political lile. There are frequent cases when a town with a predominantly Russian population cleers a Georgian or a Hyelorusistan deputy to the Supreme Soviet, while Libeks may vote for a likrainian.

The Soviet state is organized on a national basis Various peoples, tiving on defined territory, base formed various politica-daministrative units, depending on the size of their population. These are Union Soviet socialist republics, incorporating, in their turn, autonomous Soviet socialist republics, autonomous Soviet socialist

Each republic is a sovereign state, with its highest organ of power

the Supreme Soviet — which appoints the republican government

All Union republies are free to choose there status. They have voluntarily united into a sugle state — the Union of Sovert Socialist Republics (1858). — with the view to their more successful advance most. The Charman of the Presidual of the Republical Supreme Sovert is simultaneously one of the 1st departs of the Charman of the Presidual on the USPR Supreme Soviet to USPR Supreme Soviet to Consists of two chambers with equal rights — the Soviet of the Union and the Soviet of Nationalities. Both the buggest Soviet republic — the Russian Pederation — and the smallest, the Istonian republic with a population only non-hundredth that of the Russian Pederation, else the Soviet of Status Charlest Consists of the Soviet of Status Charlest Consists Charlest Consists Charlest Consists Charlest Consists Charlest Consists Charlest Charlest Consists Charlest Ch

The autonomous Sonet socialist republic is another form of a national state formation. It also has its territory, Constitution, Supreme Sovice, government, budget, Supreme Covict and capital Each autonomous republic is represented by 11 deputies on the Soviet of Nationalities, One such republic is the Yakut autonomous republic with a population of 715,000.

The autonomous regions and railroad areas are self-governing administrative units formed by small nationalities, which are not state formations. However, they train many state functions. Each autonomous region sends five deputies to the Soviet of Nationalities, and each antional area—on deputy. Their local solution of power—regional or territorial Soviets of working people's deputies—are complete masters on their territory. The Soviets are organised with

due account of the local specific features and conduct all proceedings in the language of the indigenous population. They also have their own independent budget. We can cite as an example the Adyghei autonomous region with a population of 400,000 and the Evenki national area inhabited by only 13,000 recole.

Equality of the Sowet peoples is also manifested in their economic and cultural development. Before the 1917 revolution large-scale industry was concentrated mainly in Central Rossas, the Urals and the Ulkrain Rows and republics have a modern developed economy in Soviet Central Asson republics. — Uthekstars, Kirghina, Tajikkitan and Turkmenia— where formerly there was only small scale cottage-scale industry, hig centra of iron-and-steet, mining and heavy engineering industries, as well as a part odate hybrid installation, have sprung up of the production of Rachathanha Rog romo foot times, in Tajikkitan— more than 900 times, in Rivightian— more than 900 times, in Studensian— more than 900 times, in Turkmenia— more than 130 times.

The Solviet peoples' cultural standards have then immeasurably leftore the revolution many of these peoples (core that straight feltor the translation and the straight peoples (see not straight groups as the Kazakhs to any nothing of the tiny nationalities of what is now the Soviet Far Stat and Korthi did not even have a written language of their own Now each. Union republic has its written language of their own Now each. Union republic has its scientific workers of local nationalities. National literatures and arrefer or very small nationalities workers of local nationalities. National literatures and arrefer or very small nationalities have also flourished They have all merged into Soviet utilure, socialist in content, varied in national form and internationally its papir into disease.

Now that the Soviet Union is over 50 years old there can be no ground whatsoever for national discord in the country All the nations and nationalities of the Soviet Union are marching forward to one and the same goal — the building of a communist society

by Yuri ALYANSKY from the measure 2V52DA Photographs by Oleo MAXARCY

DEDICATED NATIVE CITY,



Dmitri Shostakovich in besieged Leningrad, September, 1941.

LENINGRAD.

1941 June, 21 Saturday Nobody knew harthurs yet. The combestor of Leningrad Radio Symphony composity Desired

remain for in the whole of Leningrad y, one, of the musical capitals of the world? Could Shosfakovich have be heyer that enstead of a battle be tween two rival Joatball teams : strucile of a magneticie the world has mover known would begin between he govjet people, and fascism? A work after the war began cost

Orchestrà, Karl Kliasberg, lay down to rest after coming home from re brarsati-professor of the Leningraid Shostakovich, bought a tuket that Saturday for the next day's football maken The enducions of the orchestra left town for the weekend. Could Eliasbers have imagined that soon he would be the only conductor

> Ploase déscribe lhe performance in Leningrad in August 1942 of Doile Shostakovich's Seventh Symphony, Who conducted?"

> > Ireno Topfstedt, Srien

settle down to work But the work

went fast. By the first of September

he had already completed the score of the second movement The Seventh Symphony was swiftly proving to completion Shosta kovich decided to play it at home on the plano to an audience of a few friends and fellow composers whom he especially invited for the occasion Everyone present was astounded at the enormous sheets of score lying on the table it turned out that in addition to the usual composition of a symphony orchestra Shostakovich had added a brass band which would multiply the sound effects

koyach played nervously tensely The Seventh Symphony is about those who survived

fowards the end of the first movefascist invasion was introduced some died away, his friends asked him to repeat the whole thing from the he

evacuated to the Volga city of Kurbyshey There he finished the orchestra-

We request all musicians to come phony. No. It was out of the gues

This call was poseuted over and over orant by the loudspeakers in the grad's musical life was represented by the 150 musicians of the radio orches tra - everybody else had been evacuated. However, 27 names out of the 150 had to be circled in black And most of the rest in red - they were suffering from dystrophy Only eight names were left. They could

play an octette perhaps but a sym-

and triumphed over the blockade.



kept calling "We request all musiclass to come in and register ..." Violins, 'cellos bassoons tails were brought out Some wept, feeling they did not have the strength to pick up even the lightest instrument. But they got on their feet and made their was to the Radio building and there found themselves in an atmosphere of warmth and friendly concern. That is how the orchestra was reborn. The first sussion did not resemble any ordinary rehearsal very much However there was a second a third. The music began to acquire a voice. On the fifth of April, 1942, the new symphony season poened in the bestcerd city. The orchestra was conducted by Karl Eliasberg He had trouble walkine to the concert hall. But once on the podium he held himself firm and erect. He wore a starched, sparkling-

tion. That is why the loudspeakers

white shirt front and tails The Leningrad Radio Symphony Orchestra gave 160 performances during the war years. There is no noted flauring - was that a lot or little Each was a feat of hernism. And one of the concerts, the one held August 9, 1942, made history. That was the day the Seventh first rane Hyroughout Leningrad

The musicians gathered in the foyer, conversing in low voices, Anxiously they scanned the familiar hall. The chandeliers were burning at halfnower but they were lit! Micconhones were installed in the central aisle They were to let the world

know of the victory achieved that meht. The concert-hall was jammed Many in the audience saw each other for the first time after a lone interval many came straight from the front which then was at the very eates of the city. And the ones who could not come defended the city by artiflery fire By orders of the High Command the batteries carried out "Operation Squall" and the Hitlerites could only crawl back into their holes. During the performance of the Seventh Symphony for 80 minutes, not a single shell burst in the streets of Leningrad, not a single enemy plane broke through the defenses of the city.

Eighty minutes of music, 80 minutes of history on the streets people surrounded the loudspeakers and listened. They listened inside flats, in earth dueouts and trenches at the front. They listened in Moscow and Khaharowsk London and New York

The writer Alexes Tolstoy listened too. "No, man is stronger than the elements" he wrote "The string instruments enter the combat. The harmony of violine and the human volces of business are stronger than the thunder of the mule-hide stretched over the drum. With the desperate beating of your heart you contribute to the victory of harmony. The violins harmonise the chaos of war, silence its cave how! Blood is being spilled for the beauty of this world. It is worthwhile to live for this and worthwhile to fight Shostakovich put his ear to the heart of his Home

land and played a song of triumph The last note of the symphony died away A ringing silence blanketed the hall It held an incredibly lone time

In Muscow, an unremarkable look steps of the Central Telegraph office symphony in such unpreordentedly arduous conditions

The war ended Many years passed A group of tourists came to Leningrad from West Germany. One of them ent in touch with Eliasberg and requested

the tourist pulled a notebook out of dates of all the purformances of conductor asked "How do you know all thus? The tourist replied. 'I was amone the soldiers besiceing Lenin-

a meeting When the two men met.

MUSEUM of the Seventh Symphony

This unique museum is located in a Leniverad school. Everything that had any connection with the writing and performance of Dmitri Shosiakovich's Seventh Symphony has been gathered here. Side by side with the conductor's baton used by Karl Eliasberg at the first performance, there is a graph of the artillery fire from the Soviet positions that day. There are photographs of all the musicians who took part in the concert. There is a music score inscribed by the composer And there is a rare item, not even to be found in libraries an original programme of the premiere. Shostakovich's deducation reads. "To our struggle with fascism, to our impending victory over the enemy, to my native city of Lenmgrad I dedicate my Seventh Symphony

SEVASTOPOL:

It happened in 1941-42 — the hardest period of the Great Patriotic War. Though cut off from the rest of the country by Band and naval enriclement,

Sevastopol refused to surrender, diverting a 200,000-strong naxi army from other offensives.

That epic defence lasted eight months, to be exact 230 days.

Eventually forced out of the city, Soviet suffors and soldiers, such scooping up a handful of its soil, yowed to return.

On May 9, 1944 they resulted Sexists.

In observing the 30th anniversary of the liberation of this here-city SPUTNIK publishes a fragment from the memoirs of the writer Pyotr Sazhin, who as a wer correspondent, participated in the closing battles for the citadel.

The Comea's mountain roads have never been easy, with their steep climbs and descents and a host of climbs and descents and a host of the steep climbs and descents and a host of the steep climbs and their s

The taking of Grafskaya Pior.

THIRTY YEARS AGO

by Pyotr SAZHIN



the troughs

Assault After Assault

The decisive battles on the approaches to this city were in their third day. Tanks, artillery and aircraft softened up the sides of Mount Sapun. Sailors were "boarding" seaside Height Sakharnaya Golovka (Little Sugar Loaft. Our planes were making life particularly miserable for the nazas Never before had I seen such hunt numbers of planes over a compara tively small area Assault followed assault From both

sides torrents of metal were rained upon the heights of Mount Sapun They were coming so thick and fast that they seemed to leave no space even for a fly to crawl between them unburt. The mountain strelf cave the impression of being about to split from the explosions of artillery shells and airbombs

From the direction of Sevastopol we saw columns of smoke and clouds of earth A staff major, who had just driven up in a icen said that the smoke was coming from an oil-tanker blazing in Severnaya (Northern) Bay and that the clouds of earth were bursts on the mountainside.

Soon we beard that the unit of a captain named Shiloy had hoisted a red bapper on Mount Samuel

That victory opened the way to

Now firms flared up on Heraklivsky Peninsula Here spring was at its height. Poppies were blooming on the

hillsides, wormwood was waving little silvery paws Spring is wonderful everywhere But in the southern land of the Crimea, Sevastopol, it is unique To breathe the air and admire the scenery would ordinardy have been enough for any man. Yet now the eye sought, in this amazingly beautiful steppe, not a flo-

wer, but a target to fire at The entire landscape was affame Shells were bursting earth was flying skywards It was difficult to ascertain where the frontline was It did not remain statue for one minute. A huge army, battle-scarred, determined to settle accounts with the Hitlerites, was rolling towards Sevastopol from every direction. It was, so to speak, shifting the pari troops or more exactly. successing them away from the bills

Eight Years Compressed Into Five Days Two reinforced concrete defence

lose were behind us but another one - apparently the most challenging lay ahead Colonel General Hipecke of the Engineers, who had been in command of the Wehrmacht troops in the Crimea, had constructed several extremely complex defence belts around Sevastopol General Almend necke, made the following point-blank statement in one of his army orders. "I have received an order to defend every inch of ground on the Sevastonol beachhead You realise its importance. The beachhead is heavily detended in terms of engineering

works and the enemy, wherever he appears, will become intangled in the defence networks. But the idea of

retreating to these positions should not enter anyone's head ."

In conclusion the general added "The Russians held Sevastoned for eight months. We shall hold it for eight

vegraf" This order was read out to the nazi troops on May 3. In five days the Soviet army made great advances. and not a single unit had become entangled in the devious installations of Colonel-General Janecke Fighting was already in progress on the out-

Then came the crucial moment in the battle, the earth and the sky advanced rapidly and angrily. Dust

trailed behind them like the smoke from a prairie fire I sumped into one of the larries. iron, paralysed in a savage cranip. stones reddened by blood, earth licked by flames, dead bodies, not yet

Sevastopol! Dear Sevastopol, will I see you soon? Now it lies open before my eyes.. Many of us feel our throats constrict. The sailers in the lorries, without saying a word to each other, stand up and remove their bats and forage-caps. The road turns to Yuzhnaya Bay, Over this bay, the smoke draes like a tail.

But what has become of Sevastopol? This city, this dear white southern city, with its Doric-style semi-detached little houses built of white Inkerman stone, with fenced-in small gardens, has disappeared. Ruins and smoke. This is what Sevastopol is like now Nevertheless you're again and for over ours!

Sailor's Hot For a Play

I leaf through the vellow notebooks of that time. One of the entries said

1 By liberation, only 209 of Sevastopol's 6.000 main buildings have survived and even these are half-ruined The rest have been reduced to rubble" The city was left without water supply, without a single nail, a single plank. Its streets were the scene of an endless flow of marching troops After the sustained assault the soldiers happy they would be to take a dip. change their shirts and gulo some

The women of Sevastopol, who had lived through the horrors of nazi occupation, met the soldiers like mothers- barrels were rolled out to the sidewalks troughs and nails of water stood ready. The soldiers paused, drank the wonderful crystalclear water and snorting with pleasure scooped up flaskfuls to take alone on their further sourney. The dusty fired horses, dramed the cool water from

Another entry in my notebook-Grafskaya pier. To its old merits it has added a new one. It is on record here met Admiral Nakhimov after the beilliant battle of Sinop. From here the cruiser Ochahon led by Lieutenant Schmidt, who assumed command of the ships that had rebelled against the czarist autocracy, set sail in November 1905. Vesterday (Limean May 9, 1944) the sailor Pyotr Rubley, rushing into Sevastopol with a shock group of the marines, hoisted over the nediment of the Grafskaya pier his sailor's hat he had no flag to raise. I strongly regretted reaching that place tuo late the hat was some Instead the free

SOVIET CULTURAL NEWS

ANOTHER UNIVERSITY IN SIBERIA

The Soviet Union has opened its 66th university — in Tyumen, one of the regional centres of Sherna It will train personnel for the booming economy and culture of the region.

Its five departments — physics and

cosonw and culture of the region.

Its five departments – physics and mathematics, lustory and philology, generated the philology cosomists and geography — have enrolled a total of \$0.00 students. Among them are many members of the Soviet northern antonalities. — Nextis, Khany, Mansa The 40 faculties employ more than \$0.00 professors and researchers.

The rector of this new establishment of higher learning. Professor Igor Alexandrov, stated: 'According to plan, our university will expand over the next few years, setting up new departments, faculties and laboratories. Our physicists will study processes that take place in oil layers which are being worked, our chemists will study the properties of oil, our biologists will concentrate upon fish reproduction in Siberia. In the centre will toring up on an area of 44 bectares, where, next to the school build ings, there will be student hostels and a sports complex with a swimming

THREE THOUSAND MILLION CHILDREN'S BOOKS

The Detskaya Literatura Publishing House in Moscow is 40 years old It has turned out 20,000 titles of children's books with a total circulation

of three thousand million copies. Equaded in 1933 on the initiative of Maxim Gorky, it has attracted many sifted writers, illustrators, scientists, scholars, teachers and experienced printers who enthusiastically create books for children Among them were the outstanding writers Samuel Marshak, Kornes Chukovsky and Arkady Gaidar. This publishing house caters for youngsters of all age erouns makes efforts to engage authors from all the Soviet republics. has the world's best children's books translated and, of course, does not neelect the classics.

Detskaya Literatura is the most popular children's literature publishing house but by no means the sole one.



SOVIET CULTURAL NEWS

Books for young readers are also brought out by all Soviet central, republican and regional fiction publish-

DIPLOMAS OF THE JEWISH



After a performance of "The Witch", mowhers of the cast congrabulate firmus Lishevich, who made her debut on the stage of the Jensih Pesale's Theater.

Pollowing a review of the urban and rural people's theatres of the Khabarovsk Teristory (in the east of the Soviet Union), a Diptoma of the 1st Degree went to the Jewish People's Company

In the Khabarovsk Trade Unions
Palace of Culture it showed The Watch,
by Avrom Goldfaden, a Jewish classic
playwright.

Diplomas of the first degree and the titles of "Winners of Khabarovsk Territorial Review of People's Theatres also went to the performers of the main roles, the theatre's musi-

This theatre, in Birobidehan, the centre of the Jewish Autonomous Region, was established 10 years ago. Its repertoire includes Jewish classics and plays by Soviet dramatists and local authors Pride of place is naturally held by stage adaptations of works by Sholom Alecthem This

and villages throughout the territory
which have invariably enjoyed great
success

CYRANO — ON THE
MUSICAL COMEDY STAGE

theatre has gone on tour several

times, giving performances in towns

The Amerbaijanian composer Kara Karayev, People's Artist of the USSR and winner of the Lenn Prize, has made his debut in musical comedy by turning to Cyramo de Bergerac the famous play by Edmond Rostand.

"I have to admir, saud Kara-Kacayev, that like so many musicians, I once was under the debasson that there is a wall dividing serious and light music My work on The Purious Gascon (the title of my new production) has absolutely convinced me that light music makes serious demands

on the composer'

From the neuspapers SOVIETSKAYA SIM

HOSEOVSKY KOMSOMOLETS TYLHOOKEANSKATA ZVEZD, AND VYSHA



GAS TO RURAL AREAS GAIN ONLOZITY, USBR Minister of the GAI INDUSTRY.

Sabit ORLDZHEY, USSR Minister at the Gas INDUSTRY, in an interview gives to a Correspondent of the newspaper SELSKAYA ZHIZN.

problems are being tackled by the Soviet gas industry in the Ninth Five-Year Plan period? ORUDZHEV: According to the decisions of the Party's 24th

Congress, in the present five year plan period the Soviet gas industry is to carry on with the building of a single countrywide gas supply system. Concrete tasks have been posed in the laying of gas pipelines and the securing of the most effective was flows...

Today the Soviet Union has a total length of almost 70,000 kilometres of gas pipelines In 1973 alone, the thard year of the current plan, the network gree by almost 20,000 kilometres. Large-diameter — 1,220 and 1,420 millimetre — papes are employed in the building of new lines, which cross the talga, deserts, swamps, powerful rivers and mountain ranges. The world's most northerly gas piece high size of the page 1,000 and 1

The rapid expansion in natural gas extraction in recent years, the development of gas pipeline network and the appreciable rise in the output of liqueffed gases make it possible to supply gas to increasing numbers of towns and rural areas. A decade ago only about 1,000

cities and towns, 540 urban-type settlements and 356 rural centres had access to gas By July 1, 1973 eas had been

supplied to 1,842 cities and towns and 2,255 townships. The number of flats using gas has topped the 32 million mark 125 million people — half of the country's population — now employ this type of fuel

Take, for instance, the Kirghiz Republic, the most southerly in Soviet Central Asia. All its cities. towns, townships, collective and state farms and more than 130 industrial enterprises have been provided with gas Moreover, in this republic, with its extensive outlying pasturelands, about 20,000 felt tents and homes of shepherds have been supplied with gas

CORRESPONDENT: How is the Soviet Union extending gas service to its rural areas in general?

ORUDZHEV. Nearly 56,000 Soviet villages are already getting gas. The number of gas-using rural flats has topped 8.2 million and is rapidly growing. More than 34 million rural inhabitants — over 33 per cent of the countryside population — now employ gas.

CORRESPONDENT: What benefits are offered by the use of gas in agricultural production? ORUDZHEV: Quite a few The

ORUDZHEV. Quite a few The collective and state farms have accumulated considerable experience which corroborates the economic effectiveness and technical expediency of the use of gas

Many farms burn gas for heating livestock barns, thus cutting heating expenditures 17-18 times in comparison with other types of fuel Gas heating sharoly raises the output of livestock produce at reduced cost

Gas is also used in the heating of unprotected plots, hothouses and in the enrichment of their atmosphere with carbon dioxide. This makes the upkeep of hothouses cheaper and their cropyield appreciably higher.

Gas heating of poultry farms and poultry factories raises the survival rate of fiedgelings and improves their growth.

Gas is also finding increasingly expanded application in the protection of warmth-loving plants from freezing, the storage of farm produce, the heating of lorries and tractors in open parking areas in the cold season before their engines are started, and for other purposes.

CORRESPONDENT: What are the immediate prospects for the extension of the gas supply to homes in rural areas?

DOMES IT TUTAL INTERPRETATION OF THE PRESENT INVESTMENT OF THE PRESENT OF THE PRE

Там, где сосны, Где дом родной, Есть озера С жижой полов

Ты не печалься, Ты не прощайся, — Всё впереди у нас с тобой

Как кукушке Ни куковать, Ей судьбы нам Не предсказать.

Ты не печалься, Ты не процайся, А выходи моня потречить

Над дорогой Встаёт заря. Синны светом

Ты не печалься, Ты не прощайся, — Вель жизнь придумана не одя

Вудет радость, А может грусть...

Я оглянусь.

Ты не почалься, Ты не прощайся, Я обязательно пернусь.

DO NOT BE SAD

Words by Nikolai DOBRONRAVOV

Music by Mikael TARIVERDIEV



For each one of us there will be rendervous and partings, moments of grief and moments of joy. Do not be said As summer comes after a long winter, as day follows dark night, you and I will meet. Just call me and I will look hack. All is still alread of us.



There were grounds for all kinds of imaginings, both serious and humorous in the Barents Sea, even small thickets of marine flora hampered the descent considerably

Under the Armour of Ice

Breaking the ice, the Ob forged her way toward the continent Meanwhile, we prepared for our first dip amid the drifting iceflors of the Antarctic Our initial test was at hand, would we be gripped by claustrophobia down there? Overhead, the ice would be almost three metres thick!

We chose a narrow crack for our plunge. The water was barely visible: merely a mash of snow and crushed ice. We were showered with advice on what to do if we came across a grampus "It's a mere trifle for a grampus to tear a skin-diver to pieces and cobble him up," we had heard on many occasions from opponents of Antarctic dips. We used to reply with a confidence we did not really feel: "Grampuses are no danger; man provokes no food reaction in them." As I slipped down underneath

the ice, the glass of my mask

The group included Yevgeni Gruzov and Alexander Pushkin. both biologists, and Valentin Lyulevey, a mechanical engineer. I was to be the fourth member

What is the biological structure and productivity of the World Ocean? This question requires a study of the waters of the bleak Southern Ocean. We already knew something about life in the Antarctic from the results of the

We were to carry on the exploration of the coastal waters at the stations Molodyozhnava and Mirny. In addition, while sailing in the Antarctic on board the diesel-vessel Ob we were to dive up to a depth of 60 metres.

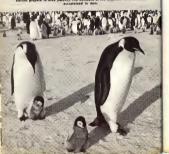
first expedition*

Scientists have long been attracted to the area of the South Shetlands, here the waters of the Pacific and Atlantic meet and mry so the marine world is bound to be interesting. Individual sources mention whole forests of giant water plants over 40 metres long. This subaquatic "jungle" raised a host of questions. How to reach the bottom if these groves turned out to be too dense? Suppose we lost our way amid the undersea

* See Sputnik, October 1979



The original inhabitants calmly go about their business (below) while the new arrivals prepare to dive (above). The denizers of the Antarctic have become



immediately became misty on the inside and iced on the outside I found myself in a fantastic world. The water was so clear that I barely noticed it Visibility was unparalleled Once my goggles had cleared I could see · a distance of 50 metres ahead The submerged surface of the acc was uneven and dark blue in colour. One that slanted two or three metres above the water descended seven to ten metres below. Through the cracks and clearings whole columns of light pierced into the water.

Spellbound, I stopped moving for a minute. An abrupt jerk of the cable recalled me to my senses. "How are you feeling?" came the sagnal "All right." I replied At a depth of 15 metres the cable pulled taut again. There was no going deeper: the safety man wouldn't permit me.

After our dives, the head of

After our dives, the head of the expedition, Alexei Treshnikov, a well-known polar explorer, suggested that we fly to the mainland and start on our programme at Molodyozhnaya station.

One hour's flight brought us to our destination

On our first day we made our diving holes. By the shore the ice is a metre-and-a-half to two metres thick so we had to use explosives. On the following day we took our first plunge. Pushkin was the first to disappear under the ice. He went down to 40 metres, but unexpectedly he reappeared holding a net full of some tiny shelffish

some tany shellish
"There's a whole cloud of
them down there?" he exclaimed
extredly These shellfish provide
food for whales and other large
denizes of the Antarette They
are members of the crustacean
plankton family, and are known
by whale-hunters as krills The
study of their migration habits
of immense scientific and practical interest.

A Weddell seal popped out of our ice hole, looked at us with curiosity, submerged and resurfaced Pushkin took a handful of krills from his net and threw them to the seal. The animal seemed to eat with visible enjoyment and licked its chops.

After the diving session I prepared the equipment for the following day's work and Pushkin cooked our dinner. We lost a lot of calories underwater so the menu had to make up for it Prying in butter on the pan was a whole kilogramme of meat,



with onions and pepper A can of tomato juice poured over it added a nice flavour. Then we drank mugs of cocoa.

After dinner we relaxed for 15 minutes. Then we sorted out our submarine treasures. Between four and seven every afternoon we photographed the penguins and other birds, of which there was an abundance.

Terrifying Cold

In the mornings it could be 10 below but in the middle of the day the sun blazed hotty. Our faces were sunburnt and our lips cracked, but we steadily moved further out under water as our bodies became conditioned.

Once, avoiding a steep slope covered by big stones, I kicked hard in order to float past a diagerous section. One fin slapped off my foot. As I beart over to pull it up I could feel my sitt ripping In spite of all my sitf roping In spite of all my efforts I must have caught it on one of the razor-sharp edges. I had to get out fast! The thick undertability, even wet, does offer some protection from the cold, but when the water tem-

perature is minus 1.9 degrees Centigrade, the thermal insulation of wet wool is inadequate.

At dinner we discussed the problem of how to protect the body from cold when we took our ice "baths". After acclimatisation we could stay underwater for about 50 minutes – almost

the limit.

Any damage to the suit, however minor, causes enormous heat losses. Since the thermal capacity of water is 700 times higher than that of air, and its heat conductivity 2.5 times greater, it sucks the calories from the body. Shock follows and man losses his capacity to resist.

Marine Jungles

In the South Shetlands we went to work in a small bay The rocks were covered with a solid carpet of sponges. On the bottom there was a mass of water plants; so dense that their leaves, floating in the current, formed a thick layer. The plants clung to my legs and aqualung it seemed that I was caught in them Any abrupt movement only made things worse. But when I stopped movine the sea current, by un-





tangling the leaves, beloed me to 150. We could be satisfied with escape. Unhurriendly. I rescued the collections we made in the one lee then the other South Shetlands area

At a depth of 40 metres I saw something unusual - parabolic arches with spans of up to five metres each. What was it? Animal or vegetable? I touched one and it felt elastic. It wasn't hard to detach whatever it was from the bottom, but it wouldn't go into the net It coiled in rings and grabbed at my hand I let my captive go and it floated easily to the top I put out my net

Preliminary explorations reveal that the ocean floor around the station Molodyozhnava is fairly well lit: the coastal ice zone has almost no snow cover. At a depth of five to eight metres the water is lifeless: in winter it acquires a thick layer of ice crystals. At a depth of 8-15 metres the animal population includes sea urchine starfish and coral Deeper, there are colonies and it rolled into a ball and sponges and ascidia. The silt

Who said that life was scarce in the waters of the Antarctic) Clockwise from upper left: There are (ellyfish, starfish, sea hedgehogs, sponges, and many other types of marine life. A diver brings up sponges from a depth of 60 metres (at left in central) This is only a small part of the prizes obtained by Soviet explorers under the ice.

slipped in.

In the boat, we racked our brains, what could it be? Finally, our biologists decided that it was a compound ascidium - a kind of marine organism.

We'll Come Back. Antarctical

The short Antarctic summer was coming to a close. Our final dive was behind us - the last of cockles, mussels and small wormlike polychaetes. The sandy soil is extremely poor in animal life The last day. In a few hours the Ob would be sailing We stared sadly at the sea: many months would pass before we returned! Our next expedition is to study the life cycle of the denizens of the Southern Ocean throughout the four seasons of the year

soil is inhabited by oysters



THE LAST PIECE OF ATLANTIS

by Yevgeni SHATKO

On my friend's birthday his wife telephoned me and said with some embarrassment:

"I just wanted to warn you. Of course, you can give him what you like, but at the moment Pelix is collecting only rare objects, so don't bother spending money on, oh, crystal, things like that "
"Not porcelain?" I asked

fimidly.
"Who do you take us for? I

mean something old, something extraordinary, like an exceptional branch of some abnormal tree, or a crude, unpolished rare stone, or maybe the tibial bone of some prehistoric animal."

"Does it have to be the tibial?" I inquired, "What about a knee cap?"

PHOTO OF THE MONTH

"That would do as long as it s
extinct"

I heaved a sigh and promised:

"I'll try to find something crude or at least extinct." Nonetheless, I felt impelled to

drop into a gift shop where ! was horrified by the polished, lacquered and gold objects.

To cut it short, by the evening I was in despair and on top of everything my five-year-old son arrived with a picce of his fur coat in one hand and a piece of fresh asphalt in the other, determined to take the latter to bed with him.

Partly through cunning, partly through using the full weight of my parental authority, I finally managed to get both objects out

Gyuzei Apanova, soloist of the Moiseyev dancers.

**Netograph by Yash MALYSHEV

104

of his clutches and into my guests, after which everyone pocket gazed at me expectantly I real-

I arrived last at the birthday ised that I was lost and in a sort party, hoping to hide myself in of daze plunged my hand into a a corner somewhere, but my pocket and came up with the piece of asphalt which I put on friend's wife and he loudly



THE LAST PIECE OF ATLANTIS

the gathering and I understood seums throughout the world will it was time for me to go and want it. You can create a furore look for my coat. in archaeology, geology, not to mention Atlantisology!" Felix grabbed the piece of

The guests enviously buzzed while one of them who had brought a box of chocolates for

"All!" I said, "Of course, mu-

a present, muttered: "Fresh lava?! From the new "Aren't you being a little volcano on Kamchatka? No? Why, has Popocatepetl started

sensational?" "Sensational?" I repeated cuttingly. "So then, without

sensation," and I pulled out the bit of fur from my son's coat and waved it in the air. "Old man this is too much"

begged, sniffing at the asphalt Felix said brokenly and giving it a tentative lick. I threw the scrap on the table "Don't torture me! Could it be and announced:

"Part of a zebra. One stripe I'll get you a second one."

"It's from ours all right. And "Unhealthy sensationalism!" if you really want to know, it's the guest who had given the

chocolates stubbornly insisted. I thought otherwise. . For Felix's next birthday I would come up with something even more mysterious. I recalled how my son had told me that in the corner of the yard, by the fence. there was something glittering that had been there for a long time and did not rust . Maybe

it was from out there? From

another world?

"When did Atlantis founder?" I asked carelessly. "Was it 25,000 years ago? This is the last piece. A memento of the hoary past, so to say ." Felix raised his piece over the

"How many thousands years

old?" Felix asked in a trembling

A dead silence descended on

asphalt, but instead of chucking

it at my head he hoarsely

"Poco - sorry - Popocatepetl

'Don't torture me," Felix

isn't working," I said, "I'll give

that it's not from our planet?"

you some lava yet."

I got fed up.

asphalt."

voice

exclaimed -

up?"

table. He was shaken "All for me?"

4 SHOWER OF NIGHTINGALES

A cross thin saline from Valta to Sochs ray into a storm. All of a sudden strange little dark lumps started raining down on the deck. To the astorish ment of all, the lumps turned out to be birds

Nightingales?" a woman said disbelievingly Passengers began to rescue the birds, risking being washed overboard in the storm. They took them to their calmis to warm them and dry out their feathers but the birds lay still eyes placed. It became absons they were

exhausted and starving What do nightingales eat? Books in the library were of no help

Somebody said inserts would do. But there were peather thes nor cockroaches on board ship. A woman recollected that once she had ted a swallow fledgeling with boiled easily white. Someone else remembered that

birds of passage cat verdure in spring It was decided to prepare a nightingale salad. With the permission of the manager of the restaurant the flowers on the tables were stripped of their green leaves and the chef prepared a salad. But the birds would not touch it Then it was the doctors' turn to try to save the birds. One of the tourists a professor, converted his de luxe cabin into a first-aid post. He called a meeting of all medical personnel on board. The ship's doctor, two surgious, a dentist and an oculist turned up. Collective-farm poultry-mosts who were on the cruise were also invited

It was decided to try glucose and caffeine injections made with an It was the equivalent of injecting a person with a needle a metre and u

built tone but there was no alternative. Out of the 20 dying birds, 15 What was the reason for the accumulation of so many nightingales? Most

probably a natural calamity of some type By morning the storm abated. At the port of Souhi there was no mooring space immediately available for the ship as she arrived behind schedule.

The captain sent a message. Unable to wait. Have migratory birds abourd They are starving and mucht die ? The reply came immediately. "As an exception you may use the freighter

pier ~ One after another the birds rose into the air. Never before have there been so many nightingales in the parks of Sochi as this year

COOKERY

ARMENIAN SPECIALTIES

LAMB WITH DRIED APRICOTS

3 onions 4 The cooking oil 2 Ths Iomato paste

7 oz dried apricols sell, pepper, partley to teste

Slice lamb into small pieces, place in pan and cover with boiling water, cook over low flame for one hour, skim periodically. Strain the liquid and fry the meat. Add to it fried onlons, tomato paste, the apricots (which have previously been soaked), salt, pepper. Then, pour in no more than one cup of the strained bound, stew until done approximately 1 to 11, hours.

Serves 41

Serve sprinkled with pursley

Pour prayy over each serving

8-10 Jeron onloss 1/2 The boiled rice

1 400 2 The buller 2 oz sour plums

2 The female paste sall, pepper, dill weed or parsley to teste slock as required

Mince meat, two omons, greens, Salt, peoper and fry in butter for 5 minutes. Add rice, egg, and mix. Peel the onions, take a thin slice off the bottom, place in bolling water and cook for 2 or 3 minutes then drain well. Take layers apart and fill each with the filling, place in pot, add the plums, fried tomato paste, stock cover and stew for And dashem

THE COLOURS OF LIFE

On the Work of Azerbaijanian Artist Mikail Abdullayev

by Elmira ALIYEVA
from 17V85TIA

Photographs by A. RAKHIL
and A. SWEDSON

In the spoons studie of Missian Modelliss, who ever any power eyes even on a cloud ydy — his canvage radiate so meet light and san This artist sings a glorious pacan to the strong and yet gentle land of Azer express it, humanie nature, bring it closer to man, to the people; to the national character As the old saying the control of faces and control of faces and control of faces and control of faces and control of the control of faces and control of faces

Abdullayev's career as an artist began in the Bakut Art School On his teachers' advice, Mikail sent his best pictures to the Moscow Sunkov Insti-

tute. Shortly, its director, Igor Grabar a well-known Soviet artist, summoned this eifted wouth for competitive exams in Moscow In the institute Abdullayey mastered the wealth of the Russian school of painting, yet he In 1940, noting the achievements of the institute's youth, Grabar, in an article entitled Our New Generation, wrote- "Without risking failure students Grigoryey and Abdullayey an well display their works beside those of well-known artists in our big anging and autumn exhibitions." Now a Member of the USSE Academy of Arts and a People's

known to the entire country

"His favourite abbjects are supported."

His favourite abbjects are supported.

If the property of telling people. The become of telling people. The become of tension. His pictures are full of tension. His pictures are full of destinate of his people. When he achieved creative muturity he turned of the support of the property of the pr

Artist of the USSR, Abdullayev is

* Capital of the Azerbusiansan Republic

"Rice-grower Girls",

"Ashug Alesker" 1970.





"Little Jami". 1965. "In far-off Jaipur" (from the cycle "Indian Suite"). 1958.





"Portrait of Renato Guttuso". Woman Collective Farmer of Lenforciar", this master of the breish warmly and tenderly coaveys the beauty of a gift, the charm of motherhood, the satisfactions of farm work. A place of importance among his works is held by portraits. In the Rome studio of Renato Guttuso, Abdullayev painted a water-colour study for a big portrain of this Italian Abdultayev's gallery of psychological poetrals, which are full of inspiration artistic vietuosity and love of man. These include "Ashug Alesker", "Saryan", "The Giris of Ajanta", "In Apsheron".

The artist does a lot of travelling He has created dozens of canvases based upon first-hand impressions from his trip to India," in India," says Abdullayev, "I barely had to change my Azerbaijanian palette. I was surrounded by equally warm, earthy

communist artist. On this study Guttuso wrote words of gratitude and admiration This work opened up "Still-life with Pomogranates".



colours and an equally rhythmic structure of the colour, which creates a customary harmony for me I could not help noting the similarity of the Indian woman to our Azerbaijanian women"

"Bengalı Ciris", 'Back from Work", "Women of Rajastan" and "Little Chandra" comprise a colourful, truthful "Indian Suite", which, in 1970, earned the artist the international Jawaharial Nehru Prize. "It is the first time I have come across such sincere and masterly works dedicated to my

country. They are infinitely dear to me as an Indian," wrote an Indian guest in the USSR in the visitory book at an exhibition where the artist's works

Abdullayev is a remarkably wide ranging artist, with well-known graphic drawings and book illustrations to his credit He also designs interesting operatic and ballet sers. Abdullayey is an important public figure, being deputy chairman of his republic's Supreme Soviet and secretary of the Board of the USSR Artists' Union

were on show



MEASURING COMPLEXITY

by Mikail ABDUTLAYEY, People's Artist of the USSR ---

Shouldn't modern art be as modern as nuclear physics, as modern as space travel? And yet and yet Nike of Samothrace, the Winged Victory a contemporary of Archimedes' lawflies gloriously through the centuries Art has its timcless foundations. There is the beauty of the world, the beauty of man the beauty of human deeds And there is the beauty of the sunrise over our Oil Rocks, with the crimson light streaming over the Caspian

waters and the silhouettes of steel

stockedes pervaded with the colours of dawn. This modern beauty says a great deal to the modern man! I will never agree that our age must be are as distinct from those of Nike of Samothrace as the laws of contemnorsely science are from the laws of

I have travelled in many lands and seen the greatest creations of the old masters in celebrated museums. In Venice's Biennale, however, I shudder

ed when I saw to what depths the modern art that peorlaims "atomic age" programmes has sunk. I tried to compare, though it was incomparable, and to understand. All I grasped amid the chaos and formlessness of what is referred to as "atomic age" art was one thing - man who is stupefied under the onslaught of hosts of machines, mechanisms, structures and blucorints, enmeshed in integrals, laser beams and concatenations of radars, racing along with streams of cosmic radiation. If one succumbs to this concept, man is through in art. But no Over and above the overwhelming dynamics which threaten to dissolve man and carry him away, the smile of Yuri Gagarin, the world's first cosmonaut, can be seen, the smile people all over the world. Similar images provide the key to everything and bring to the fore the best and most unportant which now exists in man, in humanity, in the world that now belongs to us I think that the newest broadest and most abstract concepts can be expressed in art by carthly colours, full of warmth and sincepity, soy and pain, the wrath and

delight of the human soul. The present world is like a powerful Beethoven symphony in which every-

thing can be heard inspiration and alarm triumphs and expectations There is no sustification for art's imaginary powerlessness to portray modern life in the face of this integral symphony of the world Indeed, the world is complex But, however complex it is art must be measured by the measure of man. Art needs, above all, noble characters and great human natures - natures and characters as an expression of the ethical and philosophical views of their are-They only have to be discovered

In particular, I would like to make one observation on the role of the subsect in a picture. After all Renalssance art was a literary art. Were not Ciotto's Index Kiss or Rembesadi's Prodical Son literary pieces? What is important is the form, the scale of interpretation of the subject. Plot has for centuries served the artist in expressing the world and is now capable of expressing the breadth of characters, of historic and social concepts, the horizons of our epoch viewed from the greatest of heights. However vast and grand, however

complex the contemporary world is. its centre is man, who represents the greatness, boldness and complexity of his age. Man can do everything, and so can art - through man

PUPPETEERS ARE BORN.

NOT MADE ...

by York ZARURIN

People's Artist of the Russian Federation, Zinovi Gerdt, is now absolutely sure of that . . . However, he came to this opinion not at

Zeneri Gordi making bounds with a future stage lead. The actor believes that a "testing" for - puppets in the main thing in his profession. Photograph by Afoxonder CYARDS



bitme

. The eleven operations he had undergone helped only partially. His leshad been amoutated, but he could not bend it at the knee. Yet he was a born actor, and dreamed of the stage since childhood, before the war had finished a drama studio, and even as he lay on his hospital hed he could not hear to part with his cherished ambition ... Zinovi Gerdt, former commander of a recalling the bitter battle near Relegged

Later, during the long months of being shifted from hospital to hospital. he had plenty of time to think things over, to plan how to go on living. Gerdt decided to return to acting, but to act behind a screen, to be an actor in-

The year the war ended he was limp too much be appeared for an tor of the Puppet Theatre in Moscow.

Sergei Obraztsov's puppeteers were creating a new repertoire in those years, establishing themselves in the artistic world. They had the fortunate idea of mounting a satirical production for adults, hoome that it might make people who were exhausted by the war laugh They called their production An Unusual Concert. It was a funny and pointed parody of a variety show.

"I contributed quite a bit to this concert." Zinovi Gerdt recalls "I was young. I was in love with acting. I had an enormous desire to work, and a certain amount of experience"

An Unusual Concert had its premiere in 1946, and is now in its 27th season It goes without saving that the script has been rewritten again and again otherwise the production would lose its actuality and sharpness but the idea remains unchanged

I asked Zinovi Gendt to tell me briefly what to his mind a dramatic actor and a purporteer had in common. and what differences existed in their work

"A puppet theatre actor must first special quality a feeling for puppers Some fine actors come to us from of this genre But frankly speaking they seldom succeed. For some the

selves the pleasure of actine in full Zinovi Gerdt is quite sure that vanity and the puppet theatre are not connectible. The actor is hidden behind a screen, he wears working clothes, his colleagues work closely by his side. The team spirit is inherent in the puppeteer, it arises from the "Let's say I am the master-of-cere-

monies in An Unusual Concert," he said to me. 'My puppet is a big object weighing some six kilograms. It has a large brad and body and arms. I hold its framework on a special support I manipulate its mouth, I make it speak. I make it turn. I simply haven't enough hands to make my pupper gesticulate Nina Tahakova, an actress, controls the pupper's arms" During performances Gerdt sometimes deviates from his set text

a little too loudly - his puppet will then look that way, or even address himself to the lady in the sixth row And though Nina Tabakova has no foreknowledge of this, she instinctively senses everything. "It is as though we have a single blood circulation system." Zinovi Gerdt said. In the course of the interview Gordt referred to the mutual relations be-

tween the actors several times. He spoke with ereat warmth about his comrades - of Speransky, who is modest to a fault and who is the

author of over a dozen plays of Sa. modur's rare sift as a comedian and of Sergei Obractsov, their director, as enthusiastic about puppets as a child. A sense of resoonsibility for a pro-

duction or performance is ingrained in each one of the actors of the Punpet Theatre, almost to the point of a cult Their attitude to work stems from their love of what they are doing from their striving to plant the seeds of egodness and justice. The desire to fastill these qualities in people is felt equally whether the plays are for children or adults. It should be remembered that to mount a performance for children is not the slightest bit easier than for adults. When asked to compose a "little norm" Samuel Marshak once wisely remarked, "They ask me to write a little noem as if it is easier to make a little watch rather than a big clock!"

Sergel Obraztsov's puppeteers are well known outside the Soviet Union They have visited France, Britain, the USA. Poland. Federal Republic of Germany and many other countries They appeared at the Munich Theatre in Leopoldstrasse as part of the International Arts Festival while the Olympic Games were in progress, and the local press referred to their performances as to the "absolute high point" of the festival The amaring rapport invariably created between the audience and the Obraztsov rempets was established in Munich as swiftly as in Moscow. Gerdt was torn by contradictory

teelings when the ourtain was raisedagain, and ... the enthusiastic refrom the hall filled with Germans The

It should be noted that performances of An Unusual Concert in ducted in the language of the country. Zinovi Gerdt normally arrives a week spot trying to make them topical and

The actor considers his life's work to be in the theatre, but he has also appeared in nearly 30 films in which he has painted an impressive gallery of characters whom we love and remember. He has also dubbed many foreign films in Russian.

The more famous an actor becomes the more rarely he risks his name and career. One often hears: "No. I'm not filming just now. I'm waiting for an interesting role," Gerdt is not afraid to risk his name. We often see him in a small part which becomes memorable and significant by virtue of his sensitive interpretation. He also somehow finds time to write - he documentary films. But whatever interests may occupy Zinovi Gerdt at times, he invariably returns to his theatre to his beloved puppers

A unit for magnetic treatment of seeds has been designed in Georgia. Wheat and maine seeds which are kept for some time in a magnetic field produce good crops, as agricultural cooperatives have proved in practice. Specialists discovered that the yield of seeds depends on the frequency of the magnetic field which is selected for each type of seeds through experiments.

From the nemspaper ZARYA VOSTOKA (Thibuil

Letters to the Editor

··········

higoded stand is elearly showing that if supports rightness military governments your soccer from by saying I think they

"MELODY" wital records and how many are released

Nurbert Gaybe, Eisenhüttenstadt.

Records produced by the Soviet firm Melody are sold in 72 countries throughout the world. This modern anterprise unites seven recording studies in the biggest cities in the country and four plants - in Moscow, Leningrad, Rige and Tashkent. Altogether, Meledy produces over 170 million discs a year. In 1975 the figure is expected to go up to 210 million. Moreover, sterno records are getting special attention: their production is to he raised to 12.5 million.

was put on display at the last World Expo in Osaka and ensoyed great tevour. Many Soviet recordings - Moustorosky's opera "Boris Godunov", Shostekovich's "Katerina Izmailove", all of Prokofier's symphonies - have won awards for excellence from the Charles Cros Acedemy of Recordings and at many international competitions and festivals.

Today record production is a powerful industry in the Soviet Union.

Melady releases discs in over 70 languages of the peoples of the USSR and foreign countries, it produces 11 million records intended as teaching aids.

Due to the painsteking work of Soviet specialists, millions of people in the world can listen to the living voice of the leader of the revolution, V. Lenin. Eight of his speeches have been produced in mass releases. The work on the restoration of Lenin's recordings continues.

A considerable role is played in Meledy's production by literary and dramatic works by Russian and Soviet writers. Music lovers can obtain most of the symphonic, operatic and chamber compositions of Tcharkovsky, Beethoven, Bach, Glinke, Brahms, Borodin, Prokoticy and Shostakovich as performed by ton Soviet musicians.

Fans of Soviet songs and popular lunes have enjoyed such releases as "Dance Music Orchestras", "Musical Moserc", "Guests of Moscow", "Screen Melodies", etc.

Malady introduces the music of all the national republics of the USSR to listeness. For those who wish to learn Russian, there is a special recorded course in the language - for native speakers of English, French, German, Japanese, etc.

Companing Soviet records to those of other companies, the British magazine Records and Recording wrote that the discs produced by Melody have great richness of sound united with a wonderful quality of "being there". The reverberation characteristic of Russian recordings did not hurt the purity of sound, the magazine continued, and the recordings are excellent in all respects.

LETERARY QUESTIONS

Chinghy Astronton's article in the December on modern literature. A person who thinks sontes and freir thus, undoubtedly belongs

of world hierstore. The same applies to his creat stanificance I am in complete

Setma Habe, Remucheid.

UNFORGETTABLE DAYS Each year our school organism a truconcepter. Last summer me ment abroad

me met. They greeted as with great marmin

capital of the Muldarian republic II is a Then we trapelled to the port of

youth, sun and sea This fourn appeared on the man only recently Within a short period renate wards which can handle but taskers and traubters with complex power

combined. Bright huridays cleananess are the monuments to Lenin, Marx, Pushkin - sh

mus theathy came the day of departure our wonderful golde Serges, who accompanied as during our stay in the at coroung home and sindness at teacong the par Receian-lenguage lencher, Adrian Fox

Letifia Crisan, Zatlas Romania

Dear readers, we'd like your

comments and suggestions



Off to Seek Wisdom



I had often seen Olympic and European champion Vyacheslav Lemeshev in the ring — both from a ringside seat and on relevision But I wanted to meet him personality

For a start I looked up a man who has known him for a long time — Yuri Radonyak, senior boxing coach of the USSR national team and Le-

of the USSR national team and Lemoshev's trainer Radonyak's story was absolutely

essential, not only because it enabled me to look at the middleweight Olympic titleholder through the eyes of a man who is in daily contact with him, but also because Vyasheslav him self is extremely facilizm.

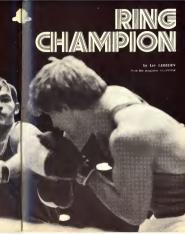
Lemeshev agreed to meet me at the Soviet Army Palace of Sports. He was easy to recognise by his blood brush monstache. He is tall, youthfully

stender, his body is supple.

Radonyak. "Who knows where he
gets his flarr from? He seems to see,
seuse and anticipate his opponent's
every move. I don't believe there's
an assateur boxer in the world toolsy
who isn't a little scared of Lemeshev,
experiably his famous right."

Many boxing fans knew that this right was injured during the European Championships in Belgrade and on Lemeshev's return home his friends who wished to congratulate him on his gold medal had to forgo shaking

"What happened to your hand?"
'I damaged it in my first bout."
'Yacheshav showed his hand, the
book of his wrist was budly swollen.
Radonyak. "He (njured his right
hand back in Munich, actually, at the



Vyacheslav commented about Belgrade. "It made winning very difficult?" "Harder than at the Olympics, In Munich I was in good form, but in

Yugoslavia Radonyak: "Vyacheslav was ready for the Olympics He's very hardworking, he trains lone and seriously He rehearses a bout with his unseen

opponent down to the last detail." "Which fight did you find the toughest in Belgrade?"

"The one with the Romanian, Nestac The final bout. The Romanian boxers are a serious lot. And of course Nestac knew that my right hand left

something to be desired. In the first round I was knocked down." "But in the third round you used your right to good advantage. Had

the pain cone? "On the contrary, the pain-killer

shot was wearing off." "But you decided to win at any cost?"

"Well, I'd say I wanted to win yery Radonyak, "Vyacheslay is a different man in the ring, though he keeps cool and calm at all times. He secondassesses his opponent, anticipates his every move and finally catches him with that right. That's what happened

in the decisive bout with Nestac He threw that burt hand in the third round and scored a knockout" "How do you explain the power of your right?" I asked Lemeshey "I don't think it can be explained in words. It's probably a matter of correct timing ."

Radonyak: "Lemeshey can sudge distance down to a millimetre, practically. Not only does he have a powerful right, but he utilises the other fellow's forward motion And his reactions are instantaneous. Even though everybody knows now that his best nunch is his right, he still managers to use it effectively and rarely mis-

Lemeshey has had 104 fights and

"Which was your hardest fight?" 1 asked

"I think with the American, Johnson,

Radonyak, "The Armenian capital was host to a tournament between US and Soviet boxers and the bout between Lemeshev and Johnson was among the most stubbornly fought At that time Slava couldn't find the key to Johnson's defence and be lost,"

Until the moment that the referee actually raised Johnson's hand, the American boxer was not at all certain that he had won In token of his respect for Lemeshev's abilities, he presented the Soviet boxer with his own championship medal of the Pan-American Games However, the two boxers were destined to meet seals

at the Olympics. Radonvak: "Before Munich, Vvacheslay prepared himself for Johnson's style and to good purpose. Johnson eliminated one opponent after another at the Olympic and then came the Johnson-Lemeshev bout It seemed to me that the American appeared confident of victory, yet Lemesbey won and moreover by a knockout"

That semi-final between Lemesbey and Johnson in Munich vividiy illuminutes Lemeshev's character In Germany. Nestac lost to the Cuban-

Montova, and Montova in turn, to Johnson Lemeshey fought the very strong boxer Montova in Cuba "It was like running into a tank"

Radonyak: "I think a lot of people believed that Montova would knock

out Lemeshey Vyacheslay doesn't look strong, whereas Montova is the incarnation of power However, Montoya was the one knocked out." Lemesbey's non-boxerlike appear-

ance has deceived many experts. The first to spot his potential was Trud sports society begins coach Ley Se galovich The Merited Master of Sports and Merited Trainer of the tissic infringly calls himself the Lemeshev family coach. Vyacheslav's older brothers. Yevenn and Yuri both boxed under Segalovich's tutelase and both became Masters of Sports. They brought the future Olympic champion to their coach when the boy was 14 years old

Radonyak: "Vyacheslay became USSR unior champ in 1969, I remem ber when Segalovich first suggested I take a look at his boy. He created an odd impression bright - 187 centimetres, weight - only 71 kilogrammes His defence was unorthowith him and discovered a powerful right hand. In 1970 Lemeshey won the European junior title But of course the real test lay ahead - boxing against adults. At the USSR cham pionships when he came up against Tolkov, I threw in the towel in the second round - there was no point taking a chance, Tolkov was obviously the stronger fighter"

dox but he was hard to hat I sparred

Indeed, Lemeshey has had his set backs, but they never not him down The last time he was defeated was at the USSR Spartakuade in 1971 "Perhans holding the Olympic title

"On the contrary," he replied

He is right, of course Every opponent wants to beat the rejening champion and comes up with his best

Radonvak "The Olympic fittle does increase the pressure You feel a brightened obligation Everyone expects Lemesbey to win by a kayo Yet before the Olympic Games some people said. What kind of a boxer The whole thing is that in training sessions Slava does not hit hard. And his style bothers many. That's the way he is, different from others."

There is no doubt that today Junior Lieutenant Vyacheslay Lemeshey is one of the Soviet Union's top boxers Segalovich believes, for instance, that he can repeat Borns Lagutin's record - become a two-time Olympic win ner - or maybe even the Hungarian Laszlo Pann's - triple gold medal-



How Are You Feeling, DIESEL?

by Leonid POLYAKOVSKY, M.S. (Engineering), senior instructor at the Moscow Bannan Higher Technical School and winner of the Konstonol Prize for his new method of measuring the wear on marine engines at sea.

Prov the Magazine YUNOST

Diagnosis of the Iron Heart

It was an unforgetable voyage Peroperly speaking, for our hults — the values of the refrigerator trawler salghir — it was quite cedinary. The distance was not too long — rome 7,000 miles, we salled from Sevaslopol to the African port of Walvis Bay. To them this was a routine affair But for us.

Can the heart tell — each minute of each day — the story of how were sould use to its continuous work? This is how the question to which we were supposed to provide an answer could perhaps be formulated. True enough, we were interested in an iron heart — the diesel engine of a ship.

Though our problem was not a medical one, scientists have long been using a medical term — 'diagnosing — in this case

Our job aboard that trawler was to test a new diagnosing technique — a radioactive method involving the use of tracer atoms. Preliminary data suggested that it would be considerably more effective than any pre-

vious procedure.

In the past, engineers estimated the wear and tear on machine parts and units like doctor who does not know what an electrocardiogramme is and can judge the state of his "patient" only by opening his chest and inspecting his heart.





The quest on board the traver caused escape the traditional chiticisting corresponds to country the equator field. The varyor is over and both to the lab. At right, below delyaheashy discusses upon a man of the results of his coverageation with a collection.

The manne diesel is a sophisticated structure with Δ host of constantly moving parts. The moment one of them goes even slightly out of order, the vessel's entire powerful heart is threatend by parallysis.

threatened by paratysias.
Assessing the wear on an engine requires taking it apart. All units must be inspected and essential measurements made but how day and essential measurements made but how the parameter month of the parameter month of the parameter monthly. A precise schedule is drewn up in advance midstamly when, in bow must hours, oil has to be dranged and some part or other replaced It can be quite "healthy and capable of operating for many more hours and still it in the parameter monthly of the parameter

is removed. Well and if some part tails to run its allotted time due to some invisible detect, then the ship is in for trouble.

We wanted to obtain something akin to a cardiogramme in order to find out how the engine was functioning and if everything was all

The Diesel Poses Problems

We ran into the first puzzle before we shiled. The engine was not yet running but the instruments were already registering wear! True enough in a small way — only one micron Still, there it was

What was the reason? We checked

'Are the shafts correctly aligned?'

Yes, we did some 20 turns " I almost jumped could it by that these manual turns of the encore had

recorded by our instruments? On that day I myself did 20 turns by hand to test my theory. The instruments showed that the were had risen by another 0.5 micron 1 made another 20 revolutions with the same result - no more wear was indicated this meant that the procedure of continual wear measurement had to be adjusted by taking into considers before the engine was started

Step by step, we explored our diesel I am not exaggerating or trying to "spiritualise" our machine, but each ensine really has its own unique character, which appreciably affects its behaviour in general and its wear in particular

Our engine vigorously exhibited its "individuality" when the ship was caught in a storm off the Canaries And when fishing began, its wear due to extra loads numbed sharply

Several days passed, and the process persisted. Why? That was another puzzle But we discovered the reason soon enough the oil had got dirty. We replaced the oil - almost 230 hours before schedule - and the diesel felt

fine again Thus arose the technique of uninter rupted measurement of engine wear It took us a long time to solve this important and difficult task. I first tackled the problem of wear back when I was in my fifth year at the institute, I was then working under produced that one-micron wear

Professor Vladimir Postnikov. He interested me in this exciting subject

"Senility" of Technical Equipment? Wear is an ancient problem. Everything man uses is subject to wear Within certain limits wear and tear on some article or other presents no great problem to man. But sooner or later comes the critical moment when shoes have to be thrown out and the vessel taken to the repair dock. In the latter case it is vitally important not to miss this critical moment

general laws governing the wear on two friction surfaces - we call them pair" Any pewly assembled 'pair' registers a higher rate of wear Later. the process becomes stabilised This stabilisation lasts until the moment of critical wear

It must be noted that the engine can also sustain wear when it is not in operation. This is known as corrosive wear (more simply the metal rusts) On the other hand under certain conditions the engine can run without sustaining wear for a time

It has been discovered, for instance that starting the engine produces the same degree of wear as five or six hours' operation. That is, why a motor car driven in the city with its numergus traffic lights registers 20 to 30 per cent greater wear than a car In a word the requirements of life

on the highway.

gave rise to the science of wear Like any field, it has many directions They all involve tests which unfortunately, until now have taken an inordinate length of time and labour. and at the same time have been un reliable. It was inevitable that new testing techniques would be developed and they were; utilising radioactive isotopes and ionising radiations.

Atomic Diagnosing

The diagnosine atom works approximately as follows. Each friction surface is activated by being impregnated with radioactive isotopes. As the engine runs, they become detached from the part together with particles of metal Cetting into the lubricants the isotopes increase their radioactivity, Special devices determine how fast radioactivity rises in the oil system - that is the rate of wear! In this process the engine does not have to be taken apart or even stopped. The tests take one-tenth the time and the economic officiency is 20-25 times ereater.

The use of isotopes will make st possible to solve the important problem of prolonging the machines life This would seem to be a fine thing But in reality everything is much more complicated First the personnel must be safely protected from radiation - especially cauloped labora tories are required Secondly, some times situations arise which simply cannot be foreseen in the conditions

Professor Postnikov developed a new method of superficial - not deep - metal activation, which does not exceed the radioactivity of the became possible to diagnose the coeine in its working condition!

No Theory Without Practice

When I graduated from the Higher Technical School I was differed a dissel-repairing job with the whaling fleet. I agreed but on one condition that I would first be allowed to work as a fitter, not an engineer. My request

The team to which I was assented ronsisted of first-class masters of their jobs. And I, though a college graduate had a long way to go before I became a real mechanical engineer. The Master of Sports in boxing in the lightheavyweight category. But being a Master of Sports is one thing and he

me egod at your 10b is something else

the dirtiest job - to clean the exhaust manifold and a diesel crankcase. I did the manifold quickly enough Then I climbed waist-deep into the crankcase. examined it, cleaned it and finally. reached the crankshaft in order to prepare it for repairs as instructed by the team-leader

I made the essential measurements

and found out that the wear was within permissible limits Did this mean that the shaft did not have to be ground? But it was not so simple as all that, the dieset's crookshaft is not repaired when it is "necessary" It is repaired after the passage of a certain number of running hours there is no saying when, exactly, repairs will become unavoidable. That was how, on the 10b. I became involved with the wear testing are-Much later in Moscow I saw

into Professor Postnikov. He inquired about the work I was doing and then suggested that I return to my old subject, which now interested me a great deal

That was how I went back to the Higher Technical School - this time as an instructor and recovoher After several years' work I corned a Macter's Degree in Engineering

Recently I was on a long business trip to the United States, where I took part in joint Soviet-American investigations. Our US colleagues displayed much interest in our methods. We plan to continue our fruitful

Now we are probing into new aspects of the same theme, very interesting oacs, I think. Above all, I am preoccupied with methods of lonedistance wear control. It is possible that in the near future our idea will find apolication in cosmonautics, in which it is vital to keep an eye on the working capacity of automatic interplanetary statious, moon-cars and other apparatuses the rigorous environment of space demands steady. precise information on the "sofety margin" available

as important to watch over the "health" of mechanisms and machines from afar Aboard the motorship A. S. Popov there is already as operating unit with a programmed task it automatically records the engine's wear, and all data come directly to the senior engineer's control panel.

Naturally, back on earth, it is just

In short, our method is opening up fascinating prospects for active control over wear, or in other words, a possibility to combat the "senility" of engineering equipment with still



PAINSTAKING DAILY EFFORTS

Problems of nature protection in the largest Soviet republic - the Russian Federation - are discussed by Nikolai Vasilvey, First Deputy Prime-Minister, and Nikolai Ovsvannikov, Deputy Minister of Land Reclamation and Water Conservancy, who is also chairman of the All-Russian Nature Conservation Society.

CORRESPONDENT: What is being done in the field of nature protection in the Russian Federa-

from the consistent, regular

VASILYEV: You cannot separate the efforts of our republic

nature protection work that is carried out across the country. We all take an integral approach to the utilisation of natural

A great deal has been done in this direction in recent times.

OVSYANNIKOV: In 1971 the Fifth Congress of the All-Russian Nature Conservation Society took place, which was attended by representatives of all the 15 Umon republics.

VASILVEV: Our main concern is presently operating industrial enterprises. We aren't worried shout the new ones, now no new Soviet industrial enterprise goes into operation until its cleaning installations are ready

OVSYANNIKOV. Control over the operation of cleaning installations has been assigned to the Russian Federation's Ministry of Land Reclamation and Water Conservancy The state commissions which accept each new enterprise include representatives of our ministry We never sun the acceptance certificate if the effluent-cleaning system is not in order. In all cases without exception we enjoy government support.

CORRESPONDENT: Is it profitable to build cleaning installations? VASILYEV Profits alone are not our yardstick. Sanitary and

hygienic, aesthetic and moral considerations are as important to us In some chemical, metallurgical and other plants the filters are extremely complex and expensive So what should we do? Allow these plants to function without filters? Let direct profits form the criteria? Certainly not.

cannot be allowed to depend upon momentary profit, though, where possible, it should be

Nature protection measures

At the Novo-Taghil Cement Plant, in the Urals, the dustcatchers, which recycle cement dust, bring in appreciable profits More than 4,000 big plants in the Russian Federation are now equipped with filters of various kind, many of them profit

earning. CORRESPONDENT: Which of all the nature protection prob-

lems would you single out? VASILYEV: I should say, that of land. It is a priceless and, at the same time, almost irreplaceable asset The arable area can be expanded but it is a difficult job According to estimates, it would take thousands of millions of roubles to open up 10 million hectares of land in the Russian Federation's non-black-earth zone

Since arable land is being encroached on by urban centres and new industrial enterprises, in recent times the attitude to building on it has become more strict. Some requirements for land are overstated. For instance, the designers of the Khabarovsk heat and power plant demanded an area of 800 hectares Thorough checking revealed that this plant could be located on a much smaller area. We vigorously fight the idea that Russia's expanses are boundless

OVSYANNIKOV: In spite of the fact that the Soviet Union has one-seventh of the world's aericultural land

NATURE PROTECTION MEANS PAINSTAKING DAILY EFFORTS 135

CORRESPONDENT. Does the state of the Russian forest cause any alarm?

VASH VEV. No. Posterity will not be left without forests. In the republic's European part, the forest area is not shrinking, it is already growing. In pre-revolutionary Russia reforested tracts amounted to only 900,000 hectares over 70 years Now, annually 750,000 hectares are reforested

In the Eighth Five-Year Plan period (1966-70) the country cut timber over an area of 10.2 milion hectares, but planted trees on an area of 11.2 million bectares

OVSYANNIKOV: The rational utilisation of natural wealth presupposes strategic thinking, so to speak, the measurement of results in time units much longer than decades. For us, the convergation of nature and the rational utilisation of its resources means, above all, work - painstaking daily efforts.



New Soviet Film --- "The Seedlings"

Spring has come to the Caucasus. The trees stand washed by rain Birds sing. But the people in that small mountain village are gloomy. That wintet the pear trees had pershed. The khechechuri was a rare variety and its fruit was sweet and juicy.

"For two combinites those trees bore."

fruit. My grandiather planted them when he was a young man," said one of the old villagers.

His grandfather had long been dead but when he was alive he did a good thang by planting trees that year after year gave people lush, sweet fruit And while his trees bore fruit he himself.

Well-known Georgian actor Remar Chihikvadze in the role

The old man has earned his rest but he has a restless spirit. He and his grandson stride down

Luke is not quite as sure be of himself in the city as he is in his native mountains.





by Yuri MIKHAILOV from the semiplator SELSKAYA ZHIZN

A Man of Great Heart

self lived in the villagers hearts What now? Will-the thread of timebreak? Old Luka Adelavadze dendes to plant new khechechuri trees. He has

way People fried to dissuade him you are an old man the journey is long and hard. But by then there was no stopping him. Together with his schoolboy grandson. Lake It imports own a mountain path.

uch is the opening of The dlings a new film reseased by Gruziya Film Studio. The script is by Suliko Zhghenti and the director is Rezo Chkhoidze The plot is simple. It follows the

journey of grandfather and grandson through towns, villages, along modern highways and narrow mountain paths We see them jogging in a wagon, under torrential rain, in the back of a

lorry, aboard a shining interurban express has.

They meet various people Alasnot all of them comprehend old Luku-Why should be go to all this trouble to obtain seedlings that will bearfruit only in 12, if not 15 years, while he is 73 himself? Why not plant trees that will bear fruit in two or three years? The old man disagrees. We must think not only of ourselves and the present, we must also think of what will come after us May the earth live forever may the sun shine upon it until the end of time, he ways

May it shine for our children aind grandchildren. Prolonged search, When after a prolonged search, Luka finally locates the seedings he he covers them with his own cost on a cold inglit ab he would little children between the cold still affects four of them. braving a piercing wind, he digs out holes to plant the little trees the earth is kind it will warm them.

A MAN OF GREAT HEART

and give them enough strength to with them The boy is weeping

survive Later when the end of the

trek is already in sucht, aboard a pass

hougful of reaching home, the old man

khechechury trees are to be planted

ine car chilled and tick and not very

instructs his grandson where the

a slippery mountain road an oncoming

lorry skids in the mud and is on the

verge of toppling off the cliff and

plummeting down into the pro-

cipace. In order to save the lorry

Luka puts his seedlings, which have

become the meaning of his life, under

Once again they are in the back of a

lorry But there are no seedlings

its wheels

Then the unforeseable happens On

Why cry, my little one?" the old man comforts his grandson "Spring will come again and we'll get other khechechuris."
The audience is left with the feeling

that whatever happens, khechechurs will again blossom in Luka's village. The 1973 Sixth All-Union Film Festival in Alma-Ata brought this preture three awards for the somario, the

directing and the performance of the principal child's role. Later that year, at the Eighth Moscow International film Festival, the

cow International Prim Festival, the Georgian actor Ramaz Chkhikvadez (Luka), won the best make role prize and the film itself carned an award Georgian Illim workers are fond of

children. This has become a tradition. However, director lease Chihaidza Imparts a special warmh to his subject. "The Seedlings" is a story about the beauty and generosity of man's spirit, about the close lies het ween.



SPUTNIK









Curtain-Raisers of the Integration Scheme

In discussing the results of the first three years of the Ninth Five-Year Plan neriod and the prospects for its fourth year, 1974 Nikolai Baibakov. Chairman of the USSR State Planning Committee, singled out, in the section entitled "Foreign Economic Relations". two major industrial projects that bave been launched; one in Eastern Siberia, the other in the Urals.

Both projects, which are being jointly controlled by members of the Council for Mutual Economic Assistance (CMEA), offer vivid examples of how the comprehensive programme of socialist economic integration is being carried out. What are these projects like? On what principles are they based and in whose interests are

they being built?

The 27th session of the Council for Mutual Economic Assistance, which was held in 1973, adopted a General agreement for the

which was held in 1973, adopted a General agreement for the construction of a large arbestos oro-dressing integrated plant. It is being built on Soviet territory—in Kiembay, the Orenburg-Region, in the southern Urals In addition to the Soviet Union, participants are other CMEA members interested in its products—Bulgaria, Hungary, the German Democratic Republic, Poland, Romania and Czecho-stowskie

This is already the second agreement of its kind The first, concluded in 1972, provided for the construction of a cellulosism of a cellulosism of the construction of a cellulosism of the construction of a cellulosism of the construction of the cellulosism of t

These agreements define each in country's share in the building of R

the given project and in receipt of products, which will be in proportion to its investment

To this end, the general agreements are complemented by the Soviet Union's bilateral agreements with the relevant countries on their concrete contributions to the building of the given industrial project. Such bilateral agreements have been signed, for instance, for the construction of the Ust-Ilira Plant. Deliveries of the materials each signatory country has pledged have already begun Romania for Instance, will deliver steel structures and cables. The Soviet Union will provide the project with electricity, the labour force, the required engineering equipment raw materials, etc. The result of these joint CMEA countries efforts will be Europe's largest plant, with the most up-to-date equipment and an annual capacity of 500,000 tons of bleached

Now let us turn to the second integration scheme project — the Kiembay Ashestos Plant. Ashes-

sulphate pulp.

by Nikotas INOZEMTSEV, Deputy
Chairman of the USSR State
Planning Committee
Transition of the State A STATE AND STAT

tos will not burn, is acid-proof. is a good binding material, with low heat conductivity and dimensional stability. Its impact load strength is greater than that of most metals and plastics. More than 3,000 items are produced out of asbestos - railway sleepers, pipes, wall panes for building projects (which are five times lighter than ferroconcrete ones and more durable). The modern building, motor car, chemical, electrical engineering and other industries cannot do without the use of ashestos

Why did CMEA countries decide to build this plant on Soviet territory? Because the Soviet Union has the world's largest known asbestos resources According to a 1970 estimate, 60 to 65 per cent of the world's asbestos resources, equalling 290 million tons, fall to its share.

Some idea of the scope of the Kiembay project can be gathered from the following two figures Its annual output will be 500,000 tons of ashestos and 24 million tons of rock will have to be processed to this end The indus-

trial buildings themselves will be unique in size and equipment. The state plan of the USSR national economic development for 1974 allocates financial and other material resources required for the construction of these

enterprises "For the first time in planning practice," stressed the Chairman of the USSR State Planning Committee. "the state plan of the HSSR national economic develcontent for 1974 contains a special section outlining measures designed to develop socialist economic integration between the Soviet Union and other CMEA member-countries "

In recent years, the CMEA countries have been building, or have already built, hundreds of major industrial enterprises. many of which to a considerable extent determine the further development of the economy of these countries and the important changes in their industrial production and goods turnover. Here are some examples to

illustrate this point Bulgaria, in conneration with the Soviet Union and Hungary, is building a very large soda ash factory Hungary, also jointly with the Soviet Union, is erecting a huge plant for processing the crude oil coming from the Druzhba-2 Oil Pipeline In the German Democratic Republic, German experts, together with their Czechoslovak counterparts, are constructing an ethylene produc-

tion complex Poland, in col-

expanded the capacities of operating ore mines and coppersmelting plants and built new ones in the Lubin-Glogow copper basin. In Romania the Braila heat-and-power plant is some up with Soviet technical aid Many similar examples could be cited They all reveal the

socialist character of the rela-

tions between the CMEA coun-

CLUE TO THE SECRETS OF SCYTHIA

Five bowls adorned with gold plates have been uncarthed by an archaeolo vical expedition of the Ukramian Academy of Sciences under an ancient mound near the city of Ordzhomkidze, in the Ukraine. The plates have pictures of stags, eagles and ornaments.

Boris Mozolevsky, head of the expedition, says that these and other funds shed light on one of the secrets of Scythian history "The tombs of Scythian kings are located in Hera," wrote the ancient Greek historian Herodotus. This place, he assumed, was near the Drueper, However, until recently archaeologists failed to find a Scythian burial mound here.

The discoveries preatly encourage researchers. The distinctions of the mound's structure, the wooden and reed covers and the sold bowls - all these were Scythian customs

There are many mounds around Ordzhonikidze Members of the expedition staff assume that Herodotus' Hera may well be found in the vicinity

HOW ONE GIRL SAVED HER PEOPLE

In a certain winter camp there lived an old man and his three daughters. He was very poor and there were many holes in his tent, and he had hardly any warm clothes to wear. The

family were freezing One day at the height of

The wind blew a whole day then another day and another, it blew so hard that the old man thought away into the taiga. All the people who lived in that camp were stranded in their tents.

'We won't be able to live through this blizzard." the old man said 'It is Kotura, the master of the winds who has sent it down on us. Evidently be is displeased with us . Now. my eldest dauehter, you must en to Kotura and plead with him to stop this blizzard

winter was cold, frosts were bitter, and members of the

"But where do I go?" his eldest daughter asked. "I don't

know the way" "I will tell you what to do and where to go but you must do exactly as I say I'll give you a small sledge and you will push it against the wind and then follow it. But mind you do not stop on the way, not even to shake the snow out of your boots. when the wind rus them open You will come to a high hill: go un it A little hird will come flying to you and perch on your shoulder. Mind you don't shoo it away, stroke its feathers and treat it well. And when you reach Kotura's tent, don't touch anything. Sit down and wait When the master of the winds comes, do as he tells you."

The eldest daughter put on her fur clothes pushed the sledge into the wind and it started easily. She followed the sledge for only a short while before the fastening of her clothes worked loose and she telt the cold. She disobeved her father's council and stopped to adjust her clothes and to shake the snow out of her boots. Then she went on her way against the wind and blizzard. She walked for a long time before she saw the hill. She climbed it, and sure enough, a small bird flew to her ready to perch on her shoulder. but the girl waved her arms in anger shooing the little bird away

Soon after, the girl descended the bill and reached Kotura's tent. She entered it and saw a big piece of roast venison. She started a fire going, got warm. and set to work on the venison picking the choicest richest morsels. Suddenly she heard someone approaching the tent The hide over the entrance was lifted and a young, broadentered. It was Kotura He looked at the girl and said 'You are welcome to my house. Live here as long as you wish but on one condition: that you help I am back from hunting and here is some meat now you cook it " The girl cooked the meat

Kotura told her to take the meat out of the pot and divide it into two equal portions.

"One half we will share between us, and the other half you must take in a not to the next tent where an old woman lives. Give her the meat and wait until she brings the pot out to you." The girl took the meat and

was howline, and the snow was falling so thickly that she could not see anything. So the girl just took a few steps, threw the meat into the snow, and returned carrying the empty pot. Kotura looked at her but did not say Then Kotura again went out

into the taiga, setting the old



Drawing by Vera SHARKOVA



to give them.
"I see that my cldest daughter
has disobeyed me," the old man
said sadly. "She did not do as
I bade her, that is why Kotura
is so angry with us now You
must go to him. my middle.

daughter."

But his second daughter, too, disobeyed her father and Kotura

drove her out of his tent
The old man sat in the tent
with his youngest daughter,
waiting for a clear day to dawn.
But the blizzard raged and
howled, blowing down people's
dwellings, leaving them without
shelter

"It is your turn now, my beloved youngest daughter," the old man said with a sigh, "I hate parting with you, but if I don't all our people will perish from hunger."

The girl went out and followed the little sledge through the bilitated, she wailzed on blindly; the whirling snow obliterated everything, the furious wind tore at her clothes, the snow got into her shoes, but she went on doggedly, ignoring the cold and the bilizzard. She did exactly as her tather had commanded.

As she went up the hill a little bird came flying to her. The girl did not shoo it away as her sisters had done. She stroked its feathers and caressed it. Then she jumped into the sledge and drove downhill straight to Ko tura's tent

When Kotura saw the girl, he laughed with pleasure, and asked her: "What have you come to me

for?"
"To beg you to stop the blizzard. Otherwise the people in

our winter camp will perish!"
"Then don't stand by the door,
come in. Come in, start a fire
and cook the meat. I am hungry,
and I expect you are hungry too

after your travelling."
The girl picked up the pot,
cleaned it well, and quickly
cooked the meat. After the meal
Kotura asked the girl to take the
rest of the meat to the tent next

door The girl picked up the pot meat and went out. She did not know which way to go or where to find the tent. She stood. pondering, and then started off at random determined to do as Kotura wished. Suddenly a little bird appeared from nowhere, the very same bird that she had seen up on top of the hill. It wheeled and hovered overhead, bidding the girl to follow it, which she did. Then she saw smoke rising from the snow. She came closer. stirred the snow with her foot and saw a door. An old grayhaired woman looked out and asked. "Who are you? What did you come for?"

'I have brought you some meat, Granny."

"Thank you, thank you, my dear girl. Give it to me. But you

stay here."

The girl waited and waited outside for a long time, until she was almost frozen. At long last

the entrance hide was lifted again. The old woman looked out and handed back her pot. The girl saw that there was something in it. She returned to Kotura's tent and looked at the old woman's

presents. There were knives, scrapers, and other things used for dressing skins, and in addition some steel needles. Kotura laughed, saying; "I see you have many useful things!

Make me some new clothes while I go out hunting."
The girl set to work, but what could be done in a single day? Suddenly an old grey-haired woman entered the tent the very

Suddenly an old grey-naired woman entered the tent, the very same woman to whom the girl had taken the meat. Now the old woman said: "Help me. There is a speck in my eye, please take it out."

The said immediately out down.

The girl immediately put down her work and took the speck out of the old woman's eye.

"That's better, now my eyc doesn't hurt any longer," the old woman said. "You've helped me and I'll help you."

She left the tent but soon returned with four girls.
"These will be your helpers and the five of you will make everything in good time."
The live girls together set to work dressing the skins, cutting them and sewing. They did not

notice when daylight became

dusk. Kotura returned from his

hunting and when he saw his new clothes he wanted to try them on. But first he picked them up and examined them. The skins were soft and pliable. He put them on and they were neither tight nor loose: they fitted him well, and the stitching was beautiful. Kotura smiled with pleasure and said "You are to my liking, my fair maiden. You have a heart of gold and hard working clever hands You are also brave: you were not afraid of the terrible blizzard because you wanted to save your people. You'll make a good wife - marry me. My mother likes

As soon as he said these words the blizzard died down. The people were no longer freezing, they came out from their tents. Men went hunting, women set to work on home chores, and children started their games in high spirits.

you and so do my sisters. Stay in

my tent for the rest of your

Transfeled by Natasha JOHNSTONE

life!"



'Please depote more space to World War II heroes, subdiers of the invisible front — guerrillas and intelligence men For instance I'd like to read

Stanislav Polanica, Poland

SPUTNIK has received similar requests from Peter Blazej of Federal Germany. Zh. Erdenbator of Mongolia, and many other readers.

OPERATION LONG JUMP

by Alexander LUKIN, Deputy Commander for Intelligence of a former guerrilla detachment from the Adventure Literature. Deserve for lear FCHSLSO

of Hero of the Soviet Union

Nikolan Ivanovich Kurnathov, the principal of this horry, was a thomo solvent infelligence distinct in the Second World Wer, the carried out dome of this principal control of the second of a special force under Calondo Bandi and the second of the second of the second parachel-deropped, his tument of 1942, near Korno, a small fown in the Utrelan, deep in the enemy rare. Millad Eurathor, who spoke fleed of the second of the second parachel-deropped, and the second fleet of the fleet of fleet



Photograph of Nikolat Kuznetsov taken in 1942.

Nikolai Kuznetsov left No. 15. Legions Street at 10 p.m They had tried to talk him into staying an hour or two longer, but he had gone, pleading tiredness and a headache. Actually, he just wanted to be alone, to collect his thoughts, and to sort out his observations of the last few days It was dark outside. The sparse street lamps barely managed to pierce the gloom of rustling, rather warm autumn driztie. He walked with precise, measured steps which he had grown accustomed to in the past vear of posing as a German officer. The peak of his hightonned can pulled low over his eyes, the collar of his light-grey army raincoat turned up, he walked in a straight line, not even trying to avoid the puddles, as though marching at a parade in Berlin.

Every five or ten minutes he met paired patrols — sullenlooking soldiers in steel helmets with submachine guns at the ready.

"Scared " Nikolai Ivanovich thought with malevolent satisfaction.

Following certain events of

the past summer, particularly the dynamiting of the Prozorov Bridge, the Germans had sharply increased the force guarding all civilian and military objectives in Rovno, doubled the umber of patrols in the town, and introduced new strict measures. However, this did not worry

Kusnetsov too much. Oberleutnant Paul Wilhelm Siebert's papers were in order. There was always an up-to-date "detached mission order" in his wallet with all the necessary stamps and signatures

A patrol checking his papers would learn that before them was a merited combat officer, a recipient of two Iron Crosses, who, after a severe wound received on the Eastern Front, was now a deputised officer of the Wirtschaftskommando (Wikdo for short), the administrative command. His responsibility was utilisation of the material resources of the USSR's occupied areas in the interests of the Wehrmacht. This explained his frequent visits to Royno.

So walk boldly. Oberleutnant Siebert, guardian of the new order in Europe, along the quiet streets of a verdant Ukrainian town! At the sight of you the subservient Polizeis spring to attention; submachine gun patrols and burly MP's with metal badges on their chests, up under the collar, salute you deferentially But keep away from suburban streets and dark alleys: there the high-topped cap of a German officer and the Iron Cross on your chest are no protection. They may rather turn out to be the target of an accurately fired guerrilla bullet ...

curately fired guerrilla bullet ...
Nikolai Ivanovach even shuddered at the thought which had occured to him for the first time. He had never been afraid of death — neither in battle, nor in the Gestapo dungeons. But to be killed by a friend. — For some reason he had never envisaged such a possibility.

Then he pictured himself coming



to Royno after the war. He would walk along the familiar streets together with Valva Dovecr. Lydia Lisovskaya and Maya Mikota, Involuntarily he smiled at the very idea; the first boy who saw them would turn them in to the militia. He imagined himself trying to persuade some moustached sergeant-major that they were not pagi seum well known to everybody in town but Soviet intelligence officers.

The sisters. Lydia and Maya. were having a tough time of it, of course. Everyone in Royno knew that their apartment in 15 Legions Street, which he had just left, was a place where German officers had a good time, while the hostesses themselves worked in pazi casinos He was only risking his life. while they were risking much more - their good name. It must be a terrible feeling to live in one's native town and have the reputation of a nazi landog. Nikolai Ivanovich was terrified to even think of what would

happen to the girls, his helpmates, if the Gestano ever discovered that Lisovskava and Mikota were not its agents, keeping an eye on the garrison and arriving officers of the Wehrmacht, but members of a Soviet special force of which he himself was one

And Valva Dovger? That frail, grey-eyed girl who played the role of Oberleutnant Suchert's fiancée so skilfully that she had deceived even Erich Koch, the Reichskomissar of the Ukraine and a Gauleiter of East Prussia. It was he personally who had recommended her for a job at the Reichskommissariat

Then Kurnetsov's thoughts

wandered back to the subject that had constantly occupied his mind lately - Paul von Ortel . . What was he doing in Royno. that outwardly calm SS officer with a mind that was definitely above the average? Kuznetsov was positive that he was an intelligence man, and no small fry, either. In this conjecture he was not guided by intuition alone: there were also some facts. In the first place, the 28year-old officer was much too young for his rank of SS Sturmhannführer. He could have been promoted to that rank only as a result of some special services he had performed. At the same time, it was obvious that you Ortel was a man of experience.

He was rather tall solid and smart in appearance. His nottoo-thick dark hair was immaculately parted at the side. His pale eyes had an intelligent and wary look.

Nobody knew where he served or whether he was connected with any establishment in town. His manner was aloof. On several occasions Siebert had observed that while he seemed to hold no official post, you Ortal carried plenty of weight both with the Gestapo and the SD Unlike most of Siebert's "friends", he was never hard un-

In what seemed like endless months of operating in the enemy rear Nikolai Ivanovich had learnt to size up his numerous officer "friends" and detect their weak points. He understood that with yon Ortel be would have to be extremely cautious: the so-tar unsuspecting Sturmbannführer would not let a single false word or move slip by unnoticed.

Undoubtedly, von Ortel was the most interesting of Oberleutnant Siebert's "friends" in Royno. He stood out from most of the Wehrmacht's officers by his outlook, independence of judgement, erudition, and quick wit. He was well-read and appreciated music

Once in a restaurant where

he was with Sichert von Ortel accosted a man - a local judging by his clothes and general appearance - and talked with him in perfect Russian, The conversation, a rather trivial one, lasted for ten minutes or so. Pretending that he did not understand a word. Kuznetsov listened carefully, and had to admit to himself that if you Ortel had addressed him somewhere in the street say in Sverdlovsk he would not have known him for a foreigner. The Sturmhannführer spoke Russian just as well as Kuznetsov spoke German.

'Where did you learn Russian so well?" he asked. "I've been studying it a long time, my dear Siebert. Did you

understand anything?" "Two or three words. I know a few dozen stock phrases that are in the army handbook"

Von Ortel nodded with understanding "I can tell you that I speak

effortless Russian Several times I've had the opportunity to see that not a single Ivan can tell me apart from his own. When I don't have this uniform on, of course."

Von Ortel laughed merrily then continued in a more serious tone:

"You look like a man who can keep a secret. All right, I'll confide in you: I lived in Moscow for two years before the war."

"What did you do there?" "Well! You can bet I wasn't

helping the Bolsheviks to build "I see . . ." Kuznetsov said

slowly. "So you are a secret agent?" "Don't bother sounding polite.

my friend," von Ortel said, "You were thinking of the word 'spy'. weren't you?" Kuznetsov raused his hands in

mack capitulation "One just can't hide anything from you. Yes, I did think of the word. Pardon me, but we army

officers have no use for that profession." "Wrong attitude," said the SS-man, not offended in the

least, "With all respect for your Crosses. I wager I've caused more damage to the Bolsheviks than your whole company."

Little by little. Kuznetsov came to realise that despite his seeming charm, you Ortel was a diabolical man. An astute cunning and ruthless enemy Evidently, the SS-man had become, in his own way, attached to the combat officer, had decided to trust him, and stopped mincing words entirely. At first Kuznetsov was amazed

at the sharpness of tone and the scathing sarcasm with which you Ortel spoke about the nazi leaders. He had no respect either for Goebbels or Rosenberg, calling them windbags, or Koch whom he called a coward and a thicf, or Goering whom he described as an arrogant shopkeeper Should someone overhear them they would be in serious trouble. Von Ortel however, seemed not to have a care in the world.

"Why are you so quite, my friend?" he asked. "You think I'm provoking you? Are you worried? You needn't be afraid of me. Watch out for enthusiasts in plain clothes I'm afraid of them myself ..."

Emerging before Kuznetsov's cycs day by day, was the picture of a man, diabolical not because of his misanthropic views but because he completely lacked any. Von Ortel was an absolute cynic. He had no convictions. He believed in nothing - neither church dogmas, nor nazi philosophy.

"This is all for the vulgar herd." he once said carelessly flinging a copy of Völkischer Beobachter down on the table. "for the mob which is canable of action only when it is being prodded to action by some Dr. Goebbels." "But why then do you serve

the Führer and Germany as faithfully as 1 do. although in a different line?" Siebert asked "Now you've got the bull by the horns" you Ortel said seriously. "I do that because

only with the Führer can I achieve what I want. Because I'm satisfied with his philosophy. though I do not believe in it, and with his methods, in which I do believe Because they suit me " Of course, the fact that Sie-

bert who had plenty of money at all times, was actually independent of the Sturmbannführer - had never asked him for anything, no matter how trivial a request - was an important factor in relations between them. If you Ortel was really in terested in enlisting Paul Siebert for some of his affairs he, you Ortel had to be the first to show interest

One day the Sturmbannführer did en

None of the Reichskom. missariat's staff had any definite idea of what was Major Martin Göttel's sphere of responsibility No one had ever been in his of fice. let alone the place where he was living Gottel did not allow even the cleaning woman in messing about with a broom and dustnan himself.

For the greater part of the workday the office of the lanky "redhead major", as he was called behind his back was locked, while its owner roamed aimlessly, or so it would seem, around the other offices, chatting with colleagues. But even officers who outranked Göttel avoided discussing anything with him, unless it was absolutely necessary.

One day Göttel volunteered to see Valya Dovger, Siebert's supposed fiancée, home, His company was distasteful to the girl but she decided not to show antipathy towards an officer whom she hardly knew and who, it was not difficult to surmise, could cause serious trouble to even more important figures than a modest secretary, a Volksdeutsche from the Reichskom-

At first Göttel's approach was standard enough. After a few routing, army-type compliments. he wistfully confessed that he was lonely. Valva knew that

after such overtures she could expect, as a rule, an invitation to spend an evening at a restaurant, and was preparing to reply that she went out very seldom and only with her france, when suddenly she realised that her escort was not so much interested in herself as in her

"fiancé" "Whatever you say, there is so much injustice in this world." Göttel complained, "No sooner had Oberleutnant Siebert come to Royno than he met a charming girl like you. And I've been here for God knows how long and haven't made a single in-

teresting acquaintance..." The major sighed ructully and aukred-

manage it?"

Valva tensed inwardly, but began to chatter easily With a carefree air she repeated the old. thoroughly elaborated story of how she had met her future

fiance If Göttel did not have the generally, though tacitly, admitted reputation of an informer his questions could have passed for excessive curiosity and nothing else. But, considering his reputation, what lay behind his questions? The usual suspiciousness of a professional sleuth? Or a founded suspicion? It was also very important where his information went. It was one thine if he informed the Reichskommissariat top officials about everything that looked odd to himanother thine if he informed the Abwehr, and a completely difterent thing if he worked for the Gestapo or the SD.

Valva understood that in any case she should notify Kuznetsov immediately Meanwhile, no matter how

slowly Göttel had tried to saunter, they arrived at Valva's house. In parting the "redhead major" expressed the hope that February Valentina would one "Tell me please, how did he day arrange a meeting between him and the Oberleutnant

Valva said she would. That evening she told Nikolai Ivanovich, omitting no detail, about her disquieting conversation with Göttel.

For us, the command of the guerrilla detachment, this was really a problem to ponder over. On the one hand, there was nothing, aside from Göttel's questions, to indicate that Sichert had been discovered. Otherwise, he would not be walking the streets of Royno: he would he at 26 Pochtovaya Street, the Gestano headquarters. On the other hand, it could be that the nazis had a line on him, but did not have any real

proof that he was connected with Soviet intelligence, and were therefore waiting. This conjecture seemed to be refuted by the supposition that the Gestapo in that case would not have acted so bluntly Finally, there was a third, and most likely, explanation; that

Martin Góttel was playing a lone hand, without letting anyone know about it for the time being. So far the purpose of his game was not clear. Having weighed up carefully all the pros and cons, the guerrilla detachment command was inclined to accept the third version and decided that Kuznetsov should meet with Göttel, exercising utmost caution of course. It was then that you Ortel

made a move which under the conditions obtaining in nazi Germany, where depunciations were a norm, had to be taken for a sign of utmost friendliness and

'I don't like that Major Gottel from the Reichskommissarian very much." Siebert told von

Ortel one day, "He is seeing Valva home much too often. I'm not jealous, you understand, but my fiancée resents his advances"

Von Ortel gave him a searching look, thought for a while, then said-

"I quite share Fraulein Valentina's dislike for that admirer of hers. I'm your friend. Paul. and so my advice is that your fiancec should beware of Göttel. I've met that fellow in Prinz Albrecht Strasse Do I have to snell it out for you?"

No elucidation was needed Germans shuddered at the mere mention of that address. No. 8 Prinz Albrecht Strasse housed the Main Office of the Gestano and the SD. So. Göttel was a Gestapo man! Nikolai Ivanovich was now

certain that having inquired about him in a conversation with Valva Doveer, Göttel would sound out his other acquaintances as well. This was confirmed the very next day - the "redhead major" called out Lydia

"I must warn you," he began, "that our conversation is strictly

confidential and in no way connected with the fact of our being Lydia said it was Göttel nodded with satisfac-

clear?"

tion and went on: "What do you or your sister

know about Oberleutnant Siehert?" Shrugging her shoulders, Lydia told him as much as she con-

sidered necessary. Göttel's next question was quite unexpected: "In talking with you, has he ever mentioned Britain?" "Britain?" Lydia asked, puz-

zled "No. never. Why should be talk about Britain with me? We have many other interesting things to talk about."

Göttel was persistent

"Then, perhaps, he sometimes used English words in speaking with you?" Lydia was amused.

"But I don't understand English . . . As far as I know, Paul speaks only German . . . True, he knows a few dozen Polish and Ukrainian words - like all the other German officers stationed here"

Göttel became thoughtful. At

"I want to ask you. Fräulein. to do the following In talking with Siebert try sometime quite casually, to use the word 'sir'

Notice how he reacts to such a form of address, and report your observations to me."

Now everything was clear. Unwittingly, Major Göttel had tipped his hand. Evidently he seriously believed for some reason, that Oberleutnant Paul Wilhelm Siebert was a British intelligence officer....

It was obvious, of course, to the guerrilla detachment command why Göttel, who suspected Siebert of espionage, did not even try to arrest him but sought to become casually acquainted with him Obviously, the major, who because of his position was well informed about the situation at the front understood that nazi Germany had lost the war, that her collapse was near, and that the nazis, and he personally, would soon have to answer for the crimes committed on Soviet soil. Therefore, he decided to get in touch with the British intelligence service as early as possible in order to, by

Ouite logically, he expected that the "British spy" Siebert would duly appreciate his discretion and put in a word for him, Major Göttel, with his superiors in London. And then . . . After all what difference did it make

switching sides in good time,

whom he served - Germany or Britain - as lone as he could erand time in the company of save his skin? He wouldn't be two charming ladics" the first, and he wouldn't be the Siebert would not be inviting a last chance acquaintance to a

At any rate, it was certain that Cottel would not tell his superiors about his suspicions concerning the identity of Oberleutnant Siebert

And so it was decided. Kuznetsoy would meet with Major Göttel and try to use the given situation to advantage The meeting, which the Ges-

tapo man had been trying so hard to arrange took place in Lydia Lisovskaya's apartment on October 29, 1943. Göttels attitude was very friendly. He tried to show his liking for his new acquaintance by lavishing compliments on the Oberleutpant's fiancée. "Everybody at the Reichskom-

missariat simply adores Fraulcin Valentina" he said with affected fervour "I drink to your happiness. Siebert " When they had downed a few

more drinks. Kuznetsov got up and, as if suddenly struck by an

idea said-"Why don't we make a real party of it, to mark our acquaintance Herr Major?" And he added laughingly: "If you promise that my fiancée will not

drunken spree with girls. Evidently, he wanted to discuss the subject that interested them both. He agreed at once

learn about it we can have a

Göttel thought he understood

The officers said good-byc to Lisovskaya and left The short square-built chauffeur Kuznetsoy's helpmate and friend. Nikolai Strutinsky, deferentially held the car door open for them

"Nicolaus," Siebert made an indefinite gesture with his hand. "let's go 'The usual place "

Kurnetsov was taking Göttel to the flat of Leonid Stukalo, an activist of the underground, a dependable man However, this plan soon had to be abandoned Something had happened in the street near Stukalo's house A crowd had gathered, and police had arrived

"That's all we need!" Kuznetsoy thought with annoyance "Now we'll have to recast the play." And he gave the chauffour another address - 53 Le-

gions Street" "Are we going back?" Göttel asked, surprised

"No I was going to call for

then remembered that she must be over at her friend's " Kuznetsoy told him. Robert Glass was a minor

official of the Paketaktion a typical occupation-regime establishment which was in charge of sending to Germany parcels of food and clothes looted from the civilian population. Glass was considered a zealous worker -industrious obliging but not brilliant. His superiors thought highly of him

General Hermann Knuth the Paketaktion chief and Second Deputy to Erich Koch the Reichskommissar of the Ukraine. would have had a stroke if he learnt that Robert Glass, the most modest of his officers, was a Dutch communist, and underground worker in contact with the guerrillas who had already rendered them many services

It was to his flat that Kuznetsoy now decided to go Glass welcomed his unev-

pected guests and muckly laid the table Kuznetsov removed his helt and holster and told Strutinsky to hane it up on a nail behind the wardrobe. He suggested that Göttel take off his Hesitantly, the major did so,

"My girl-friends must be late,"

someone who lives here - but said Siebert smiling, "Let's not waste time. Have a drink. Herr Major"

Göttel did not mind, and Nikolai Ivanovich filled their glasses with egg liqueur. By and by they started a conversation filled with hints and subtle innuen-

does. It is hard to say how their diplomatic fencing would have ended if Nikolai Strutinsky had not made a blunder. When Kuznetsov went out to wash his hands, he sat down at the table

without permission Major Göttel gave a start. No German soldier moreover one of Polish descent, could have sat down at a table with officers even if he had been invited. But such a liberty would not have been tolerated by a British army officer, either. And that was what Göttel had assumed Oberleutnant Paul Siebert to be. It followed . It followed

that Siebert was not an agent of the British Intelligence Service. Then what was he? A Soviet intelligence agent? Horror gleamed in Göttel's eyes He made a lunge for his helt and

Half a minute later he was pinioned and firmly tied to the chair. Pale with fright, the major was shivering uncontrollably. Large beads of sweat stood out on his forehead. Due to an accident the whole

scenario had changed Now there was nothing for Nikolai Ivanovich to do but, casting aside all camouflage, interrogate the nazi counter-intelligence of ficer. In an attempt to save his life Gottel blurted out everything he knew "Who is Sturmbannführer

Ortel?" Kuznetsov asked "That I cannot say . . ."

"I repeat: who is von Ortel?" Kuznetsov raised his voice. "But I really don't know." Gottel cried out frantically "No

"Not even Dr. Jorgens, chief of the SD?" Kuznetsov asked

sarcastically "Even Dr. Jorgens I only know that Sturmbannführer von

Ortel has vast powers from the Reich Security Main Office in Berlin. He has the right to skip all channels and personally get in touch with Gruppenführer Muller and Brigadeführer Schellenberg in Berlin.

Kuznetsov almost gave a whistle: "So von Ortel is really a big shot," he thought.

"What is his official status in Royno?" he asked

"I don't know. He has practically nothing to do with us. He has an office of sorts in 272 German Street, disguised as a dental office. Two or three times he has had visitors from Germany Sometimes he has taken on his own selection, prisoners from the Cestapo to his office. None of them ever returned. What he wanted them for or what he did with them. I do not know."

Kuznetsov could see that

Göttel was not lying. Evidently,

the local Gestano men knew

nothing about you Ortel's secret mission in Royno. There was nothing more of interest to Kuznetsov that Göttel could tell him. Yet. Nikolai Ivanovich asked him one more question in "Why did you decide that

I was an Englishman?" "Never occurred to me the

Russians might have such intelligence men." Göttel muttered elumly

The next day Major Martin Göttel did not appear at the Reichskommissariat, Neither did he come to work the day after The messenger who had been sent to his place found the flat empty. Judging by the thin layer of dust covering the furniture

eral days ,
Resides Lydia Lisovskaya's
apartment, Siebert and von
Ortel often met at the officers'
casino in Rowno's man street,
now called German Street, it
was one of the most popular
gambling dens with the Germans. Von Ortel was foul of
both roulette and cards. As for
Siebert he frequented the cards and

because there were always many

officers of all arms and services

milling around, and he could

pick up much important information there.

"You know, Siebert," von Ortel once said thoughtfully step shey met at the casino, "for some reason I like you a lot. No, don't try to laugh it off. I assure you there are not more than a dozen people in this

world whom I like."

The SS-man's voice had a sincere ring.

"Why so?" Kuznetsov asked
"And you, can you name at
least five of our mutual acquaintances whom you would like to

have for friends?" Kuznetsov replied quite hon-

estly:

Von Ortel laughed contentedly.
"There you are! But to hell with them Let's talk about you.
Tell me frankly: after you've got
two bullets from the Russians
and two Crosses from the
Pührer, are you still eager to get
to the front?"

to the front?"
"I'm a soldier, Herr Sturmbannführer," Kuznetsov replied.
"If I'm again sent to the front
I shall unhesitatingly fight for
the Pührer, the German people,
and Great Germany.

Von Ortel spread his hands in mock admiration. "Wonderful, Paul! But do you have to be so official? I'm not your regimental commander, you know. And besides, why do you think that you can fight our enemies only at the

front?"
Siebert twisted his lips in a scornful grimace.

"I know, here in Rovno there are lots of these fighters against young girls and old invalids suspected of being saboteurs and suerrillas."

Now it was von Ortel who

Trowned.
"Don't speak so lightly, Siebert Unfortunately, guerrillas are a very serious matter. I don't envy those who have to deal with them But I'm talking about something different. I wouldn't be your frend if I sweested

anything of the kind"

Von Ortel fell silent and pondered. He seemed to be weighing up something in his mind Nikolai Ivanovich did not break the silence, realising that the conversation was about to turn to the main thing for the sake of which he had struck up and

brink of a precipice.

Abruptly von Ortel came out of his reverte. From a pocket of his black service coat he took out a thin silver eigarette case with two golden zigzags, the lightning SS emblem, embossed on it. Kuznetsov accented a cisa-

maintained this friendship which

for him was like walking on the

Taking a light offered by the nazi, Kuznetsov was conscious of a steady, appraising look directed on himself. They sat puffing on their cigarettes

rette.

"Paul," von Ortel began unhurriedly, quite casually, "what would you say if I suggested that you change your speciality? Become an intelligence officer, for instance?"

for instance?"
"Me? You are joking, von
Ortel. What kind of intelligence
agent would I make? I'm just
an army officer who can command a company, and that's
about all. What a wild notion!
Besides. with all my respect for

you, I've never quite liked that profession."

Von Ortel slapped Siebert's

Von Ortel slapped Siebert's knee in a friendly manner, and said somewhat didactically:

"My dear friend, nobody likes beer at first, either. As the French say, everybody without exception likes only louis d'or. And as to whether you are suited for intelligence work, I'm a better judge. Take my word

Von Ortel certainly knew how to handle people. He realised that he had already said enough to the modest combat officer, and that he must be given time to digest the unexpected but flattering proposal with its many implications. And so he switched the conversation to another, quite neutral, subject.

Kuznetsov reported his conversation with von Ortel to the guerrilla detachment command immediately. Judging by everything, von Ortel had taken our bait We suggested that Kuznetsov continue his role but without adopting any definite com-

out adopting any definite commitments.

"Try to find out," we advised Nikolai Ivanovich, "what specific job that benefactor of yours has in mind for you. Don't forget, however, that this might be a provocation Exercise utmost of the Nazi Military Intelligence caution Don't overdo things." Kuznetsov returned to Royno

The first person he met with was Maya Mikota This was no accident. It was due to the fact that out of all the girls who were at Lydia Lisovskava's par ties von Ortel definitely showed preference for the cheerful charming Maya. He naud his attentions to her but not very seriously with a shade of condescension, teasing her constantly but good-naturedly. In other words, he behaved as mature men sometimes do towards very young girls, and Maya then was only eighteen. Nevertheless she used the Sturmbannfnbrer's soft spot for her very cleverly. and while flirting innocently obtained much interesting and valuable information. As a Gestapo "aeent". Maya was directly subordinate to von Ortel, and the seasoned intelligence man taught her in all seriousness the tricks of the spving trade. His advice to Maya gave us an idea

of how German spies were Von Ortel was ambitious and pinned great hopes, though not immediately, on his student. He dubbed her "Mata" - after the famous German spy of the First World War and variety dancer Mata Hari. It was with her help that Wilhelm Canaris, later chief

made his career. Evidently, Sturmhannführer von Ortel also planned to go far with the beloof our Maya.

Nikolai Ivanovich met her during the day. They strolled about for a long time, the girl telling him all the latest news in Royno. In conclusion she said

"By the way, my chief is going away somewhere."

"Von Ortel?" "Yes. He is very pleased with something. Told me he had been shown great honour, and that the matter was of paramount

"Where is he going?" Maya shrugged

"He didn't say. " "Maya, try to recollect every detail of the conversation, little things, something that was only implied. This is very important." The girl understood perfectly that it was important, but she only shook her head in reply.

"I didn't ask ... And he isn't telline Wait a minute... He said he'd have some Persian rugs

for me when he came back ' Kuznetsov was excited. His intuition had told him that there was some connection between von Ortel's proposal to Kuznetsoy and his planned departure Persian rues - irrelevant? Hardly They must also have some bearing on the operation in

which you Ortel considering what was already known about him, was to play no mean role, In parting. Kuznetsov in-

structed the girl:

"Try to pump him as much as nossible. Pretend that you are sorry to see him go. Drop a hint that you are not indifferent to him and are anxious about his going Remember his every word, no matter how trifling it may appear to you at first."

They said good-bye and parted.

Kuznetsov met von Ortel the following night at the usual place - the restaurant of the officers' casino. Von Ortel had just won 200 marks from an air force lieutenant-colonel. He was therefore in high spirits and a hit drunk. He made no mention of their previous conversation, but he suddenly remarked-

"A man like you. Siebert, needs friends who can apprecrate your abilities and put them to proper use."

Von Ortel had a talent for dramatic effect. He told Siebert that he would, at the first opportunity (and this would be soon enough), introduce him to SS Sturmhannführer Otto Skor-

zenv "Skorzeny?" Siehert echoed doubtfully. 'The hero of Abruzzo and rescuer of the Duce?"

"Certainly Why not?" you Ortel replied casually, enjoying the dramatic effect of his statement, "Otto is an old friend and colleage of mine. Right now there is something we are on together"

The sinister name was well known to Kuznetsov. For several months it had figured prominently on the pages of nazi newspapers and magazines adorned with loud superlatives. Nazi propaganda had shrouded it with near-mystic legend. making an idol of the Germanic

race out of Skorzeny. At the time in question SS Sturmbannführer Otto Skorzeny was the chief of the SS terrorists and sahoteurs of the Sixth Division of the Reich Security Main Office. Even the chief of the Sixth Division, SS Brigadeführer Walter Schellenberg, was wary of Skorzeny. And he had a good reason to be, for Skorzeny had been recommended to that post of supervisor of the SS secret assassins by none other than Ernst Kaltenbrunner, the head of the Reich Security Main Office, the security service and the security police Everyone in the SS and the SD knew that Kaltenbrunner and Skorzeny were bound by a 15-year-old friendship.

It was well after midnight when the SS-man reminded Sie-

bert of his proposal. He was very drunk by then Perhans this was due to the eveitement of his coming trip, but it was the first time that Kuznetsov saw him lose his self-control. His eves glittered feverishly, his always immaculate hair was ruffled, his speech had become rambling and incoherent. His normally steady hand shook as he filled Siebert's glass with cognac - for the umpteenth

"Well, what have you decided. Paul?" he asked Kuznetsov laughed

"You haven't told me the main thing. Herr Sturmbannführer what am I supposed to do?"

"The same thing you've done many times - risk your life. Not in this uniform but in circles though Another difference if you succeed you get money besides a new ribbon, real money - not these lousy marks which you throw right and left in these cheap joints."

Then you Ortel did something that really surprised Kuznetsov He gripped his shoulder almost forcing him down to the table and breathed hotly in his ear:

"It'll be real money, my friend, with which you'll be set anywhere, even if our beloved Great Reich vanishes into thin air like a soap bubble. It'll be gold. dollars, pounds! People like us Sighert are always needed Of course, we won't be able to come to terms with the Russians Me. they would just hane. You much! get away with 10 years and serve them somewhere in Siberia nothing to look forward to either But, thank God, there still are good places on earth South America for instance

Kuznetsov was somewhat disconcerted by what he had heard Or, perhaps, it was a provocation? Not likely In nazi Germany such utterances were not made even in provocation

Slowly and hesitantly, as though still thinking it over, he said "So, you think we are on the

rocks?" "High and dry." you Ortel said, adding a profanity, "After Stalingrad and Kursk, only a miracle can save us. And the role of miracle workers has been assigned to Skorzeny, myself . , well, and some others You can become one of these saviours if you want to Here's to miracles?"

They downed their drinks Von Ortel went on

"I'm leaving for Iran my

friend " Siebert feiened surprise seed in Russia " Von Ortel shook his head

"No this time it's Iran The Big Three are going to meet there at the end of November We shall eliminate them and turn the tide of the war. We'll try and kidnap Roosevelt so the Führer will have a better bargaining position in talking with Ameri-

"Iran? I thought you special-

Von Ortel went on enthusiastically: "We'll fly in groups. Our men

are being trained at a special school in Conenhagen. You too will have to go there for a couple of weeks to learn a few things."

firmly "it's a deal " Von Ortel was obviously

entiefied "Now you are talking, Paul!

I'll be counting on you, then, Kuznetsov was very excited when he came to the detachment Before he even changed he went to report to the command about the attack being plotted

" And so I suggest that at our next meeting von Ortel should be liquidated," concluded Nikolai-Ivanovich

As human beings we shared his feelings but as intelligence men we understood that exactly

the opposite must be done We could not afford to touch a hair of yon Ortel's head. In fact, from that moment on we had to protect him from harm or "Von Ortel is our only lead fo

the plot," we told Nikolai Ivanovich. "If you kill him we'll lose that lead and will be completely in the dark. You've got to win his confidence and find out who else besides Skorzeny and himself is eoine on that trip, their distinctive marks, addresses in Teheran, and finally the plan of the attack."

For several minutes Kuznetsov sat in silence, his head clasped between his hands. At last he "All right." Kuznetsov said stood up, already calm. and chies "I'm sorry I was so rash comrades. Of course I was

wrong." "We must have you Ortel's photograph," we told Nikolai

Ivanovich. He sat thinking for a while, then shook his head ruefully

"I'm afraid it's impossible to sneak a shot and get a good picture. He is very cautious. In the street he always pulls the peak of his cap over his eyes, and inside he usually sits in a shaded spot propping up his cheek with his left hand. Besides

it will take too long to send the photograph to Moscow, and we

have only a few days." He was right, of course, There was only one thing to be done. We gave Nikolai Ivanovich a sheet of paper and a pen, and asked him to draw us a verbal portrait - a very detailed and precise description of the man's appearance, done according to a

scientific system. Soon after that a report on the plot and Kuznetsov's description of von Ortel were radioed to Moscow

. In a large grey building in the centre of Moscow a smartly uniformed captain put the decoded radio message from Medvedey's detachment on the desk of a counter-intelligence chief

The chief, a middle-aged man with a very tired-looking face. took his glasses from a nocket polished them carefully with a piece of chamois and began studying the message.

"Well." he said to himself musingly, "we are getting some very interesting facts."

He got up from his desk. twirled the dial of the large wall safe and opened the heavy door Rummaging inside, he located a thin folder. From it he pulled out two sheets with typewritten reports and carefully reread both of them Following the terse lines of the first despatch he visualised the event it dealt with. It had happened a few days earlier ... The capital of a certain

Balkan country to all intents and purposes occupied by the nazis at a late hour in autumn. Rolling eently, its tyres whispering on the concrete of the flying field. a Jone black Mercedes pulls un beside a huge bomber with no markings. Huddled against the cold, a man climbs out of the car. He looks like an ordinary bank clerk. But he is no clerk, And he is far from ordinary. He is SS Brigadeführer Walter Schellenberg, chief of the Sixth Division of the Reich Security Main Office. Two men hurry to meet him. They report to him, Their names, though not shrouded in legend like Otto Skorzeny's are no less known in certain quarters. One of the men. Sturmbannführer Julius Schulze, rendered an important service to the Pührer as far back as the "night of long knives", when he helped Hitler to get rid of his rivals Röhm and Schleicher. The other man. Wilhelm Merr also has an "illustrious"

record

Linder the black wine of the plane six other men stand immobile on their backs the humps of parachute packs. They have no names. They left them in Copenhagen Nor will they need them. No matter how the operation ends - in success or failure - the six are not coming back, ever But they do not know this .

The report completed a short command is given and the field empties The black Mercedes drives away. With a mighty roar of engines the bomber takes oft and melts into the night. The navigator is in his compartment On a table before him is a chart illumined by a faint bulb. A pencilled circle marks the destination: Shiraz

Soundlessly, the black Mercedes races across the city Reclining in the black leather seat the Brigadeführer hurriedly jots down a radio message: "SS ReichsEthrer Himmler No. 8 Prinz Albrecht Strasse, Berlin, Secret. Reich importance. Operation Long Jump has started." . The second report in the

wall safe, just a few lines. concerned the fact of increased activity lately by Max yon Oppenheim, a noted archaeoloeist and nazi resident in Iran

Placing all three sheets in

Oberleutnant Paul Siehert never saw his "friend" and would-be superior officer again. When he returned to Rovno a few days later. Maya Mikota told him the sensational news the day before SS Sturmbannführer von Ortel had shot himself in his "dental office" in 272 German Street. Maya had

been told this at the Gestapo.

She had not seen the corpse ...

front of him the tired middle-

aged man said softly, to himself

Kuznetsov was absolutely sure there was no corpse - von Ortel had simulated suicide. But he was worried; why had you Ortel left Royno so suddenly? There could be only one of two reasons. Either he had been unexpectedly summoned to Berlin, or he had suddenly become alarmed over his excessive frankness with an army officer In the latter case Kuznetsov was in a very dangerous situation Von Ortel had divulged to Sicbert a secret of state importance. and he might decide to have the

dangerous witness removed We took every precaution to safeguard Nikolai Ivanovich As

for the reason for you Ortel's sudden disappearance from There were some strange goings on in Teheran in late November, 1943. Several prominent members of the German colony there vanished into thin air one after another One morning the valet of one of them, on extering the bodroom of his master with a heap of fresh newspapers as usual, lound only a rumpied bed and a pyjama betton. All of his master's suits were in their usual place, in the

At night, brief but fierce skirmishes occurred now in one part of the city, now in another. Sometimes a single pistol shot rended the silence. The faithful Muslims only varged their heards in hewilderment; what a poisy place Teheran had become! In a certain house in the street leading to the airport the Teheran police found the dead bodies of two young men. There were no papers on them It had proved impossible to establish their identity or nationality, nor had anybody tried very hard. The bodies had one distinctive teature, however - a strange mark tattooed near the left armpit. The slow-moving Teheran police did not know that these marks indicated the blood group of their owners and were tattoeed only on SS officers.

The C-54 plane, carrying the President of the United States, Franklin D. Roosevell, landed in Tcheran. It had flown trom Cairo, covering 1,310 miles over the control of the Cairo, covering 1,310 miles over the Cairo, covering 1,310 miles over the Cairo, covering 1,310 miles over the Saghdad, the Bupbrates and the Tigris. The President, tred after the long flight, and aready fatally ill, was driven to the US Embassy isst over a mile out.

side the city.

President Roosevelt's party to the conference consisted of 77 persons, including Harry Hopethins, his special assistant, Admiral Leaby, his Chief of Staff; Averell Harriman, General Marshall, General Arnold, General Arnold, General Dean, and Major Bettinger (the President's Sonicial Way 17th party also included the famous Philimpine cooks

The next morning. Sunday, November 28, President Rosework was visited by Averell Harriman and Michael Reilly, chief of the President's bodygard. His visitors looked worred Harriman said that the Russians had just informed him that the city was full of nazi agents, and that "unpleasant meidents" were particularly and the president of the president of the president's life.

"The Russians suggest that you move to one of the villas on their Embassy grounds, where they guarantee your complete safety." Harriman concluded

"And you Mike, what do you say?" the President turned to his chief bodyguard. Gloomy Reilly muttered something remotely resembling advice to accept the offer.

At 3 p.m. the US President and his close associates moved to the Soviet Embassy grounds in the centre of Teheran. The rest of the President's party stayed at Camp Park, headquarters of the US forces statunged in the Per-

A strong guard was posted around the British Embassy, where Prime Minister Churchill was staying and which was practically next door to the Soviet Embassy.

sian Gulf area.

The Soviet intelligence service had reliably ensured the safety of the Big Three.

About a month later, the generalia detachment in the forests near flowno, thousands of miles away from Teheran, ceceived a bundle of Moscow newspapers, considerably back-dated. It gave us great pleasure to show one of them, a copy of Pravda for December 19, 1943, to Nikolal Ivanovich Somewhal later, he repeated the contents of

an item in that issue that had been carefully marked in red pencil, to Maya Mikota. It was a kind of compensation for the Persian rugs she never received it read:

"London, December 17 (TASS)
According to Reuters' Washington correspondent. President
Roosevelt said at a press
conference that he had stayed at
the Russian Embassy in Teheran,
and not at the US Embassy,
owing to what Stalin had learnt
about a nazi jolt.

"Marshal Stalin had told him. President Roosevelt said, that it was possible that an attempt on the lives of all the participants in the conference would be made. He had asked President Roosevelt to stop at the Soviet Embassy, so as to avoid the necessity of making trips across the city. The President said that perhaps a hundred German spies had been in Teheran, It would have been rather advantageous to the Germans. President Roosevelt added, if they could have dealt drastically with Marshal Stalin Churchill and himself, as they were driving through the streets of Teheran."

Thus, Operation Long Jump was cut short by Soviet intellisence

Translated by Anabole KRYSHANSKI

IN OUR NEXT ISSUE

- HOW TO BECOME A PERSONALITY? This question arises before each new generation. The subject evoked a lively discussion in the pages of the most popular newspaper among Soviet young people - KOMSO-MOLSKAYA PRAVDA.
- THE SUN OF RUSSIAN POETRY On the 175th birth annipersary of Russia's greatest poet, Alexander Pushkin, a well-known writer and literary critic shares his reflections on the poet's works. Colour photographs of places associated with Pushkin accompany the text
- THE ATOMIC HEART OF MANGYSHLAK About the world's first industrial atomic power plant and the story of how atomic power produced fresh water for a town in the middle of a desert.
- LEARNING WHILE LAUGHING Everything you manted to know about Soviet film cartoons
- CHINA'S SPECIAL AREA, Excerpts from the bestseller of the same name - hy Pvotr Vladimirov, who in 1941-45 was a TASS correspondent reporting from Mao Tsc-tung's headquarters.











